

**BLOOMSBURG  
UNIVERSITY**

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**UNDERGRADUATE CATALOG 1989-1991**

***Bloomsburg University***

is committed to providing equal educational and employment opportunities for all persons without regard to race, color, religion, sex, age, national origin, ancestry, lifestyle, affectional or sexual preference, handicap, Vietnam era veteran, or union membership. The university is additionally committed to affirmative action and will take positive steps to provide such educational and employment opportunities.

Inquiries may be referred to the Director of Affirmative Action, 122 Waller Administration Building, Bloomsburg University of Pennsylvania, Bloomsburg, PA 17815, (717) 389-4528.

# **BLOOMSBURG UNIVERSITY OF PENNSYLVANIA**

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*Undergraduate Catalog  
1989-1991*

*Prepared March 24, 1989*

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The provisions of this catalog are not to be regarded as an irrevocable contract between the university and the student. Bloomsburg University reserves the right to amend any academic, administrative, or disciplinary policy or regulation (or fee) described in this catalog without prior notice to persons affected.

Requirements for graduation as well as curricula for degree programs, such as those requiring professional certification/licensure, may change throughout the student's matriculation. Such changes will not be retroactively required; however, the student will have the option to choose the new program or requirement, if desired.

Exceptions may be necessary when changes in professional certification or licensure standards mandate changes in academic requirements or in university programs.



*Council of Trustees:* seated, from left, E. Alkire Jr., Gerald Malinowski, Harry Ausprich (president), John Dorin (chairperson), Richard Wesner; standing, from left, Ramona Alley (secretary), Stanley Rakowsky (vice chairperson), Gail Zurick, LaRoy Davis, Karen Cameron, Kevin O'Connor. Missing from the photograph is council member Robert Buehner Jr.

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## Academic Calendar 1989-1990

### Semester I

Classes begin  
  
Labor Day - No classes  
  
Thanksgiving recess begins  
  
Classes resume  
  
First semester classes end  
  
Final exam period begins  
  
Winter Commencement

### 1989

Monday, Aug. 28  
at 8 a.m.  
  
Monday, Sept. 4  
  
Wednesday, Nov. 22  
at 2:50 p.m.  
  
Monday, Nov. 27  
at 8 a.m.  
  
Saturday, Dec. 9  
  
Monday, Dec. 11  
  
Sunday, Dec. 17

### Semester II

Classes begin  
  
Semester break begins  
  
Classes resume  
  
Spring Weekend begins  
  
Classes resume  
  
Second semester classes end  
  
Final exam period begins  
  
Spring Commencement

### 1990

Monday, Jan. 15  
at 8 a.m.  
  
Saturday, March 10  
  
Monday, March 19  
at 8 a.m.  
  
Friday, April 13  
at 10 p.m.  
  
Monday, April 16  
  
Saturday, May 5  
  
Monday, May 7  
  
Saturday, May 12

# Welcome to Bloomsburg University

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Welcome to Bloomsburg University! We are delighted you have chosen to continue your education with us. We believe our academic and cocurricular programs will help you further develop characteristics of mental resourcefulness and responsible self-expression. The liberal arts preparation is designed to enhance your abilities to think critically, clarify values, and demonstrate problem-solving skills.

Bloomsburg is characterized by openness in communication and involvement in decision making by students, faculty, staff, and administrators. In this atmosphere of mutual respect, individuals experience personal and professional enrichment and share in the accomplishments of common goals.

We want you to succeed and invite you to take full advantage of the varied resources of Bloomsburg University that complement your academic study. Best wishes to you as you pursue your educational goals.

A handwritten signature in black ink, appearing to read "Harry Ausprich".

Harry Ausprich  
*President*

# *Table of Contents*

<b>Facts about Bloomsburg University • 1</b>
<b>Enrollment Management • 2</b>
Admission and Readmission • 2
<b>Academic Policies, Practices, and Services • 5</b>
Academic Advisement • 13
Developmental Instruction • 14
Tutorial/504 Services • 15
Student Support Services • 15
Upward Bound • 15
<b>Expenses, Fees, and Refunds • 16</b>
<b>Student Life and Services • 18</b>
Undergraduate Curricula • 26
General Education Requirements • 27
General Education Courses • 28
Buildings and Facilities • 32
University Services • 34
College of Arts and Sciences • 37
College of Business • 117
College of Professional Studies • 128
School of Extended Programs • 161
School of Graduate Studies • 164
Administration • 166
Faculty • 167
Adjunct Faculty • 181
Faculty Emeriti • 183
Administrative Staff • 184
Index • 187



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# Facts about Bloomsburg University

## A Pennsylvania State System of Higher Education University

Bloomsburg University of Pennsylvania is one of the 14 state-owned universities that compose the Pennsylvania State System of Higher Education. In addition to 64 undergraduate degree programs and one associate degree program, Bloomsburg offers 23 master's degrees in select academic disciplines and a doctoral program in elementary education in cooperation with Indiana University of Pennsylvania.

## Organization

Bloomsburg University has more than 6,900 students and is organized as three colleges (Arts and Sciences, Business, and Professional Studies) and two schools (Graduate Studies and Extended Programs). The scope and internal structure of each college is described in the succeeding chapters of this catalog.

## Location

The home of Bloomsburg University is its namesake, the Town of Bloomsburg, the county seat of Columbia County, Pa. The industrial, trading, and residential community of nearly 12,000 is located 80 miles northeast of Harrisburg and is within two miles of two interchanges off Interstate 80.

Bloomsburg is served by Greyhound and Continental Trailways bus lines. Commercial airports at Wilkes-Barre/Scranton on Interstate 81 and at Williamsport are approximately an hour's drive from Bloomsburg.

## History

An academy "to teach youth the elements of a classical education" was established in Bloomsburg in 1839. The academy continued with varied fortunes until 1856 when a charter was prepared and stock issued to reorganize it as the **Bloomsburg Literary Institute**. Institute Hall, later renamed Carver Hall after Henry Carver, an early principal, architect, and teacher, was erected in 1867. Today, our oldest building, Carver Hall is the university's landmark.

Largely through the efforts of J. P. Wickersham, superintendent of public instruction, the **Bloomsburg Literary Institute** became the **Bloomsburg Literary Institute and State Normal School** in 1869; it continued under this name and organization until 1916 when it was purchased by the Commonwealth of Pennsylvania and named **Bloomsburg State Normal School**.

The emphasis at the Normal School changed during the early 1920s from secondary and college-preparatory courses

for special teachers to full-time teacher education. In May 1927, the institutional name was changed to **Bloomsburg State Teachers College** and the school was authorized to grant the Bachelor of Science in education for teachers in elementary and secondary schools.

Under the administration of President Francis B. Haas (1927-1939), great progress was made in the teacher education program, and a new degree program in business education was initiated.

Upon the appointment of Dr. Haas as state superintendent of public instruction, Dr. Harvey A. Andruss, then dean of instruction and a former director of the Business Education Department, was appointed president, a position he held until his retirement in 1969. During World War II, the U.S. Navy V-12 Office Training Program was conducted on the Bloomsburg campus. As a result, a campus building was renamed Navy Hall. In 1957, a division of special education was instituted, and today, Navy Hall still houses that program.

Major expansion in facilities, faculty, and student body followed. Full-time enrollment rose from 1,743 in 1960 to 6,400 undergraduates in 1988.

In 1960, the institution's name was changed to **Bloomsburg State College**. Authorization soon followed to grant baccalaureate degrees for liberal arts programs in humanities, social sciences, and natural sciences/mathematics. Graduate study, leading to the Master of Education, also was inaugurated. In 1968, approval was received for the Master of Arts, in 1970 for the Master of Science, in 1976 for the Master of Business Administration, and in 1982 for the Master of Science in Nursing. A cooperative doctoral program in elementary education began in 1982.

Commonwealth legislation enacted on July 1, 1983, established the State System of Higher Education, and Bloomsburg State College became **Bloomsburg University of Pennsylvania**. Bloomsburg's president, Dr. James H. McCormick, became the system's interim chancellor and later its first permanent chancellor. Dr. Larry W. Jones, Bloomsburg's former provost and vice president for academic affairs, served as the university's interim president until July 1985, when Dr. Harry Ausprich assumed the chief executive position.

Bloomsburg is a strong, multi-mission institution offering curricula in liberal arts, business, nursing, allied health sciences, and teacher education. Degree programs are offered at associate, baccalaureate, and master's levels in addition to a cooperative doctoral program.

## Accreditation

Bloomsburg University is accredited by Middle States Association of Colleges and Schools; National Council for the Accreditation of Teacher Education; National League of Nursing; Council on Education of the Deaf; and Council on Social Work Education. Programs have also been approved by the Pennsylvania State Board of Education and the State Board of Nursing. The bachelor of science program in chemistry is approved by the American Chemical Society.

# ENROLLMENT MANAGEMENT

The area of Enrollment Management is responsible for marketing the university to prospective students, as well as selecting, advising, and scheduling students and maintaining student records and providing various academic support services. The goal of this area is to integrate student recruitment and selection with student retention. This approach increases the likelihood of a student experiencing academic success.

## Admission and Readmission

### Instructions for Correspondence

Correspondence concerning admission and documents which pertain to admission should be addressed to: Director of Admissions, Bloomsburg University, Bloomsburg, PA 17815; or you may telephone (717) 389-4316.

### Application Procedures

Application materials and instructions for application may be secured by writing the director of admissions.

To be a candidate for admission, one must complete and submit an official application to the Office of Admissions. The applicant is responsible for requesting that an official transcript of his or her academic record be sent to Bloomsburg University by the secondary school's guidance office.

A nonrefundable application fee of \$15 must be paid prior to consideration of the application.

### Criteria for Evaluation

Admission to Bloomsburg University is determined by the applicant's academic and personal qualifications. Decisions are reached without regard to race, color, creed, national origin, sex, or physical handicap.

Applicants other than those eligible under early admission must be graduates of, or seniors in, accredited secondary schools, or must have secondary school equivalency as determined by the Credentials Evaluation Division of the Pennsylvania Department of Education.

Acceptance is determined by the director of admissions upon evaluation of secondary school preparation, achievement scores on the Scholastic Aptitude Test, personal characteristics, and institutional capacity.

Acceptances are tentative if based on evaluation of transcripts which show work in progress; final action is taken after complete transcripts have been received and evaluated.

An applicant must have on file scores of the Scholastic Aptitude Test of the College Board. It is the responsibility of the applicant to arrange for the test and to request the forwarding of the scores directly from the Educational Testing Service

to Bloomsburg University. Bloomsburg University's College Entrance Examination Board code number is 2646. A photostatic copy of the high school test report on an official high school transcript also is acceptable. No other standardized test will serve as a substitute for the Scholastic Aptitude Test.

### First-Year Students

Freshmen are admitted to the university in only one of eight academic categories: allied health sciences, arts and sciences, business administration, business education, computer science, interpreting for the deaf, nursing, or teacher education. Students may petition for an internal curriculum change after enrollment. Transferring into a high-demand program is possible but not guaranteed.

### Transfer Students

An applicant who was previously enrolled, or at the time of application is enrolled in another college or university, is a transfer applicant.

The information supplied in Application Procedures and Criteria for Evaluation applies to transfer applicants. American College Test results may be submitted by a transfer applicant instead of the Scholastic Aptitude Test results. Test results are not required from applicants who have successfully completed 30 or more semester hours of college credit. Transfer applicants must request each college attended to send an official transcript to the director of admissions regardless of whether credit was earned at the other institution(s).

A transfer student may be considered for admission if he or she is certified as holding good standing academically and otherwise in the college last attended and having an overall quality point average of 2.0 or better on a 4.0 system of all courses in which passing and/or failing grades were recorded.

To be competitive for admission to most programs, however, a transfer student should have a cumulative GPA of 2.50 or higher.

### Educational Opportunity Programs and ACT 101

The goal of these programs is to equalize educational opportunity for students regardless of their economic background or status.

Any individual with a high school diploma or certificate of equivalency is eligible to apply for admission to these programs. Nontraditional criteria are applied in estimating potential of an applicant when it appears that the environmental background may have adversely affected grades and/or standardized test scores. The director of admissions may require an applicant for these programs to file supplementary information as needed for proper consideration.

Opportunities for financial aid are described in a brochure which may be secured from the Office of Financial Aid. (See the section on **Student Financial Aid**.)

Most students admitted are expected to participate in a summer program prior to the first semester of their attendance,

where special assistance in tutoring and counseling is given to address specific academic, financial, and social problems. Permission to be exempted from this requirement can only be granted by the director of these programs.

Inquiries should be sent to the director of ACT 101/EOP or the director of admissions. (See section on **Developmental Courses** for course offerings.)

It is recommended that a student interested in admission arrange for an interview with the admissions counselor who is responsible for these programs.

## Readmission of Former Students

Students, who having been formally admitted to degree study and attended Bloomsburg University fail to enroll or withdraw for any academic semester regardless of the reason, must apply for readmission if they wish to reenter the university. It is suggested that students apply early for readmission.

Readmitted students are responsible for the graduation requirements and academic policies which exist at the time of their reentrance.

The director of admissions may require an applicant for readmission to file a letter containing such supplementary information as is needed for proper consideration.

Students under academic dismissal are ineligible for readmission for one calendar year. They should present evidence of successful achievement at another college or university as part of any application for readmission.

Readmitted students who were formally dismissed for academic deficiency have two final grading periods in which to regain minimum academic progress or good standing. If dismissed the second time, these students may not attend the university for additional degree or nondegree credit study.

## Second Baccalaureate Degree

An individual who applies for a second baccalaureate degree must have completed the first degree at Bloomsburg University or another accredited college or university. The student also must add at least 30 semester hours of undergraduate courses in residence during regular academic years and/or summer sessions at Bloomsburg University.

All curriculum requirements for the second degree must have been satisfied and free elective credit must have been taken if necessary to complete the additional 30 semester hours. If the same course is required in both degree programs, it cannot be credited as part of the 30 semester hour requirement for completion of the second degree.

## Early Admission

Outstanding high school students may be considered for admission prior to high school graduation. In addition to strong achievement and high aptitude, applicants for early admission must have the endorsement of their high school to receive consideration. College credit earned may apply toward the requirements for a high school diploma. It is recommended that any student interested in early admission arrange an interview with the director of admissions.

## International Students

Residents of foreign countries should initiate their application well in advance of the semester they plan to enroll. Non-USA citizens who are not resident aliens need to submit a special application for international students. This application may be obtained by writing the director of admissions. Students whose native language is other than English are required to submit the results of the Test of English as a Foreign Language (TOEFL) administered by the Educational Testing Service in Princeton, N.J. The minimum acceptable TOEFL score is 500. Those students who fail to earn a score of 500 are urged to investigate one of the ESL Language Centers which are located throughout the United States. Upon completion of the ESL program, the minimum GPA acceptable to supplement a TOEFL score of under 500 is a 2.5.

Certificates of educational training should be accompanied by certified translations if they are presented in a language other than English. Credentials should supplemented by brief course descriptions of subjects successfully completed.

## Nondegree Credit

Admissions procedures for students seeking undergraduate, nondegree credit are outlined in the section on the **School of Extended Programs**.

## Campus Visits

Personal interviews are welcomed but not required. Arrangements can be made for an interview by contacting the Office of Admissions at (717) 389-4316. Students should bring an unofficial high school transcript to the interview if they do not have an application on file. Personal interviews are available Monday through Friday from 8:30 a.m. to 4 p.m.

Several Saturday open house days are held on the Bloomsburg campus during the academic year. Open house programs consist of a general meeting with admissions staff and administrative personnel, a question-and-answer session, a campus tour, lunch (at a nominal cost), and meetings with faculty from various academic departments. Participation in an open house day may be more meaningful than a personal interview because prospective students have the opportunity to meet directly with members of the university faculty. Dates and details of open houses are available upon request from the director of admissions.

## Off-Campus Visitations

Each year, the staff in the Office of Admissions visits secondary schools and community colleges throughout Pennsylvania and neighboring states. They also participate in approximately 100 college night/career day programs as well as the New Jersey, Philadelphia, and Pittsburgh National College Fair programs. Prospective applicants are encouraged to check with their secondary school or community college counselors to determine if a university admissions representative will be visiting their institution or attending a nearby college night program.

## **Advanced Placement and College Level Examination Program**

A student may receive a maximum total of 64 semester hours of credit by examination or experiential learning. Credit may be awarded for successful completion of institutional examinations and/or approved external examinations. The university recognizes two external examination programs: the College Level Examination Program (CLEP) and the Advanced Placement Program of the College Board.

The minimum score of awarding credit for general CLEP examinations is the 50th percentile of the sophomore national norms. Credit is awarded for the subject CLEP examinations for achievement at or above the mean score achieved by students in the national norm sample who earned the grade of C in a regular college course in the subject. Minimum scores for awarded credit and the amount of credit granted can be secured by writing the director of admissions.

A score of 4 or 5 on an advanced placement examination exempts a student from the introductory course in the tested area and gives credit. Credit and advanced placement are awarded in calculus for a grade of three. A score of three in all other areas exempts a student without credit from the introductory course. Advanced placement is not granted for grades of two or one.

Advanced placement may be granted in English Composition after consideration of the applicant's verbal SAT scores, Test of Standard Written English results, and high school achievement.

## **Advanced Standing for Military Service Educational Experience**

The recommendations of the American Council on Education as stated in its *Guide to Evaluation of Educational Experience in the Armed Services* are: The applicability of such credit to the requirements of the student's curriculum is determined by recommendation of the dean of the college and confirmation by the provost and vice president for academic affairs.

United States Air Force-I courses validated through college-level examinations are subject to the provisions for acceptance of correspondence courses. Qualified veterans enrolling in military science are eligible for placement into the advanced course based on their prior service and desire to seek a commission through the Reserve Training Corps program.

## **Health Record**

An applicant who is offered admission must submit a medical examination report form prior to enrollment. The appropriate examination report form is forwarded to the applicant upon receipt of advanced fees.

Final permission to enroll is contingent upon a favorable review of the medical history by a university physician.

## **Temporary Withdrawal**

A student may request a temporary withdrawal for a specified period by securing the appropriate forms at the Center for Counseling and Human Development. To be eligible for a temporary withdrawal, the student must submit completed forms to the Office of Admissions for processing. A student must be in academic good standing or making minimal progress toward good standing and must request the temporary withdrawal prior to the registration date of the intended period of absence.

A student on a temporary withdrawal is assured a place in the semester designated for return provided the instructions that are part of the temporary withdrawal agreement are fulfilled, and advance deposits are submitted at the time designated by the director of admissions.

A student who returns from a temporary withdrawal of a calendar year or less in duration is responsible for the graduation requirements and academic policies that applied at the time the temporary withdrawal was requested. A student who returns from a temporary withdrawal of more than one calendar year duration must satisfy the graduation requirements and academic policies which exist at the time of return and is then classified as a readmitted student.



# Academic Policies, Practices, and Services

Academic policies and practices are subject to change; the policies of this chapter are those authorized as of Feb. 1, 1989. If there are subsequent changes that are effective for 1989-91, insofar as possible, these will be announced in the *Pilot*; the changes made after publication of the *Pilot* are announced in *The Voice*.

## Registration Policies and Practices

### Student Responsibility

It is the responsibility of the student to know and observe the academic policies and regulations of the university, to confine registration to courses for which the prerequisites have been satisfied, and to meet the requirements for graduation.

In case of changes by the university in graduation curriculum requirements, degree students who attend without interruption may choose to satisfy either the requirements as they existed at the time of their entrance or the new requirements; if they elect to satisfy the new requirements, they are responsible for them in total. All students who are readmitted to the university and part-time students must apply to the provost and vice president for academic affairs for permission to be graduated under the requirements existing at the time of their original admission to Bloomsburg.

### Definition of Full-Time Student

An individual who is enrolled for 12 or more semester hours is classified as a full-time student throughout the semester. One who is enrolled for fewer than 12 semester hours is a part-time student. Where the word "student" appears without clarification either by word or context in this catalog, full-time degree student is implied. Students should be aware that failure to maintain a certain number of credits per year may affect eligibility for financial aid, athletics, etc.

### Scheduling Classes and Registration

Students enroll by scheduling classes, paying fees, and registering on the first day of each semester or summer session. The scheduling of classes is usually completed during the prior semester. Classes in progress for the current semester always constitute an obligation to the student. All scheduling procedures for the next semester shall not conflict with this obligation. The dates for scheduling and advisement are announced by the registrar. To schedule, students obtain a class schedule booklet, meet with their advisers, and complete a class scheduling form, which is then presented to the registrar.

Seniors will schedule first followed by juniors, sophomores, and freshmen. Fall freshmen will have their schedules prepared in advance with an opportunity for counseling and schedule changes during the orientation period.

All students must complete English Composition I and II (or the equivalent) by the end of their sophomore year.

Students shall not be required to take part in cocurricular activities until after 3:30 p.m. Scheduled activities have precedence over unscheduled meets, practices, etc.

Students off campus at the time of scheduling due to student teaching, internships, etc., will prepare their proposed schedule, which will be processed at the appointed time with those of their peers. These students will need the supervisor's signature and must mail their class scheduling form to the registrar.

Students will be billed according to the number of credits scheduled. (See section on Expenses, Fees, and Refunds.)

Students must register in person on the first day of each semester or summer session according to the instructions for registration issued by the registrar. Special provisions for registration are available for non-degree students and part-time degree students. Students who do not register will have their class schedules dropped at the end of the first day of registration.

Students with unpaid fees, overdue library materials, and other obligations due the university will be denied scheduling and registration privileges.

Students with disabilities should contact the Office of the Registrar to make special arrangements for scheduling of classes and registration.

### Schedule Changes

A course or courses may be dropped, except by first semester freshmen, during the schedule change period (the first five days of classes), but none may be added except for extenuating circumstances.

All courses agreed to with the adviser prior to registration shall constitute a full class schedule. Should the student drop a course during the schedule change period (the first five days of the semester), the student will not be permitted to add a course except under extenuating circumstances.

### Late Registration

A student may register late until the close of business on the sixth day of the semester or the first Wednesday following a summer session registration. There is a special fee for late registration unless the student presents a medical excuse at the time of registration.

### Semester Hour

A semester hour is ordinarily defined as the credit for one weekly period of 50 minutes in lecture, discussion, or recitation for one semester. In some cases, as in laboratory, studio, or internship, there may not be a one-to-one correspondence between experimental time and credit.

### Residence Requirements

At least 32 of the last 64 semester hours credited toward a bachelor's degree must be taken in residence at the university.

Former Bloomsburg students who are certified for teaching by completing two or three years of college work and who are candidates for the Bachelor of Science in Education must complete at least one half of the remaining work for the degree program in residence. Residence credit is given for courses by Bloomsburg University for college credit.

## Class Standing

A student has academic standing as a freshman until he or she has 32 semester hours of credit, as a sophomore from 32 to 63 semester hours, as a junior from 64 to 95 semester hours, and as a senior after 96 or more semester hours of credit. Transfer credit, if any, is included in these figures.

For purposes of social and housing privileges and regulations, the definitions of class standing are as follows: freshman, to and including 29 semester hours; sophomore, 30 to 59 semester hours; junior, 60 to 89 semester hours; senior, 90 or more semester hours or 6 semesters as a full-time student.

## Normal Load and Overload

The normal course load of a student in any semester is 16 semester hours. A student in good standing is limited to 18 semester hours, unless he or she receives permission for an overload by his or her academic adviser. A grade point average of 3.0 or higher is required of the student before permission can be granted for an overload. (See the section on **Basic Fees**.)

A student who is making minimum progress toward academic good standing may schedule no more than 16 semester hours (see the section on **Academic Good Standing**), and a student reinstated upon appeal of an academic dismissal is limited to scheduling 13 semester hours (see the section on **Satisfactory Progress**).

## Pass-Fail Policy

After attaining sophomore standing, a degree student may elect credit courses on a pass-fail basis in accordance with the following rules:

A maximum of two courses (not more than 7 semester hours in total) may be included as part of the minimum graduation requirement of 128 semester hours. No more than one pass-fail course may be taken in any one semester.

A student may request to take a course on a pass-fail basis until the close of the business day on the second Friday of the semester or the first Wednesday of each summer session.

Courses taken pass-fail must be free electives; no required courses may be taken pass-fail. Required courses are those used to satisfy requirements for majors (including required cognate courses), minors, or general education.

The instructor is not informed that the course is being taken on a pass-fail basis. Grades of A, B, C, D, or E are translated into grades of P or F, with the grade of P recorded for a grade of D or higher and the grade of F recorded for E. Grades of P and F do not enter the computation of a Quality Point Average.

If subsequent to completion of a course on a pass-fail basis the student should change his or her major to one in which the instructor's original grade is required, the student may request that the chairperson of the academic department be notified of the actual letter grade earned.

A student who has received a grade of E in a course may not take it later on a pass-fail basis.

A student may revoke a decision to take a course on a pass-fail basis. The revocation must be completed by the close of the business day one week after the middle of the semester. This will allow the pass-fail option to be used again.

## Auditing of Courses

A full-time student who is enrolled for less than 17 hours of course work may, with consent of the appropriate dean and subject to attendance fees as stated in the **Basic Fees** section, register for one course as an auditor. If the registrant attends at least three-fourths of the regular class meetings a V will be reported by the instructor, and the course will be entered on the academic record without credit. No assignments are made to an auditor, and no papers or examinations are accepted by the instructor for grading or recording either during the period of enrollment or subsequent thereto. An auditor may not participate in laboratory or studio work if such work is part of the course audited.

A part-time student may register as an auditor subject to the provision that when computing the fee paid by the student, the course audited will be counted the same as if it were taken for credit. Individuals who are not enrolled as students may apply for audit privileges through the dean of the School of Extended Programs. Acceptance depends upon such factors as space in class and educational background.

## Credit by Examination

A student may petition for the privilege of establishing credit in a course or courses listed in the *Undergraduate Catalog* through a comprehensive examination instead of through registration and class attendance. The following regulations govern this provision:

The student must present evidence of adequate experience with the course content either through experience other than college attendance or through independent study of the course content.

A student may not petition for an examination in a course audited nor in a course from which a failing grade has been recorded.

The student must present evidence of equivalent experience if the course involves laboratory or studio work.

The student's petition must be approved in sequence by the department chairperson and the dean of the college in which the course is offered.

An examination committee must be appointed by the department chairperson and approved by the dean of the college. Unless the course is an advanced course which is taught by only one member of the faculty, the examination committee must include at least two faculty members.

The examination must cover the course syllabus in a

comprehensive manner. Suitable standardized examinations may be used. The examination must be written or, if oral, subject to transcription. Where a skill such as typing or shorthand is a course requirement, the written and oral aspects must be supplemented by demonstration of skill. All papers must be filed in the department office for three years after graduation.

If the student passes the examination, a grade of P is assigned for the course. If the student fails, no record is made. The course does not count in the student's normal quota of pass-fail courses.

A special fee of \$30 is charged for courses challenged by institutional examination taken for credit regardless of the number of credits awarded for that course. Upon receipt of approval, this fee is payable at the Business Office. Evidence of payment must be presented to the department before the examination can be administered.

Suitable adaptations of the above procedures may be used to validate transfer courses taken in nonaccredited colleges. No fee is charged for an examination to validate such credit. Examinations may be based upon the syllabi of the courses taken at the previous institution or, in case the student wishes to establish equivalency with courses at Bloomsburg University, upon the syllabi of courses offered in this institution. (See the section on **Advanced Placement and College Level Examination Program**.)

## Graduate Courses in the Senior Year

Seniors needing fewer than 18 semester hours of course work to satisfy requirements for a baccalaureate degree may, with approval of a department chairperson, apply to the dean of the School of Graduate Studies for permission to supplement undergraduate courses with graduate courses. Graduate credit for graduate courses will be awarded upon verification of completion of the student's undergraduate degree.

## Class Attendance Policy

Regular classroom attendance is expected of all students. However, a student will be afforded reasonable assistance by a faculty member when class work is missed for such reasons as:

- Personal illness
- Death or critical illness in the immediate family
- Participation in a university-sponsored cocurricular activity (Mutually satisfactory arrangements for assistance must be made by the student when the activity is announced.)

The instructor is not required to give make-up examinations or review class work missed as a result of unauthorized absences.

A faculty member with departmental approval may adopt a reasonable, alternative policy if class members are provided that policy in writing during the first week of classes.

## Grading and Records

### Course Requirements and Progress Reporting

In the first week of classes each semester, teaching faculty will distribute in writing at least the following information:

- Requirements for achieving each letter grade
- Any relationship of class attendance to the course
- Any other course requirements
- Weighted averages of requirements for computation of a grade

- Procedures for making up tests or other work missed through excused absence

• Grade Posting Policy — In the event grades will be posted, each student shall be given the opportunity to request in writing that his or her grade not be posted. If a student does not make the request, the instructor may assume that permission for posting has been granted.

At any time during the semester, teaching faculty shall be prepared to inform students of their academic progress should the student request this.

At the end of a semester or summer session, the final grade for each course is recorded on the student's permanent record; a copy of the semester's grades is sent to the student's home address or another address designated by the student.

## Mid-Semester Grades

Mid-semester grades of D and E are reported to degree students with 32 and fewer credits earned. These grades are not permanently recorded.

## Grades, Quality Points, and Quality Point Averages

### Definition of Grades

Grades given at Bloomsburg are defined as follows:

- A—Excellent
- B—Above Average
- C—Average
- D—Minimum Passing Grade
- E—Failure
- W—Withdrawn
- I—Incomplete

"I" is a temporary grade given only when the instructor believes that the student has been unable to complete the course requirements due to circumstances beyond his or her control. Failure of a student to take the final examination or complete other course requirements without prior arrangement with the instructor of a legitimate excuse is not justification for a grade of I.

When an instructor submits a grade of I to the registrar, it must be accompanied by a formal, written plan for the student to complete the course requirements and the appropriate letter grade that would be assigned if the plan were not completed by the student in the time specified. The plan for the student to complete the course requirements shall be drawn up by the instructor with the acceptance of the student. Unless specifically stated in the written plan to the contrary, it is assumed that work will be completed prior to the end of the next regular semester. When the plan has been completed by the student, the instructor will recalculate the grade to be assigned for the course and submit this new grade to the registrar according to established procedures.



A request for an extension of time to complete course requirements must be initiated by the student prior to the deadline of the plan on file in the Office of the Registrar. The student must present suitable documentation to the instructor indicating that circumstances above and beyond his or her control persist or new circumstances of that nature have developed. It will be granted only upon approval of the instructor and the dean of the appropriate college.

**P — Passed** This grade is recorded when a student takes a course on a pass-fail basis and does work which would lead to a grade of D or higher. The grade of P also is recorded when a course is passed by proficiency examination and when a student receives a passing grade in a noncredit course or co-curricular activity such as varsity sports, musical ensembles, theater, and forensics.

**F — Failed** This grade is recorded when a student takes a course on a pass-fail basis and does work which would lead to a grade of E. The grade of F also is recorded when a student receives a failing grade in a noncredit course or a co-curricular activity.

**V — Audit** (See the section on **Auditing of Courses**.)

**R — Research** This grade is assigned by the instructor only when a student has been unable to complete a research component of a course because the length of time for the research exceeds the end of semester and when a formal plan for completion of the research is filed with the instructor and the chairperson. Provisions for removal of the grade are the same as those for the grade of I. The instructor must submit the grade of R to the registrar along with the formal plan for completion of the research and the grade to be assigned to the student if the research is not completed satisfactorily in the time period stipulated. The plan for the student to complete the research shall be drawn up by the instructor with the acceptance of the student. Unless specifically stated in the written plan to the contrary, it is assumed that the work will be completed prior to the end of the next regular semester. When the plan has been completed by the student, the instructor shall recalculate the grade to be assigned for the course and submit this new grade to the registrar according to established procedures.

**X — No Grade Reported** When the grade of X is recorded, the provisions for determining academic honors, good standing, minimal progress, and satisfactory progress are not applied until the grade of X is removed.

## Quality Points

Grades of A, B, C, D, and E have quality point values as follows:

Grade	Quality Points
A	4
B	3
C	2
D	1
E	0

## Quality Point Average

The Quality Point Average (QPA) is computed from the record of courses taken at Bloomsburg University with grades of A, B, C, D, and E. The computation is as follows:

- Multiply the number of semester hours for each course by the number of quality points for the grade in the course and add the products.
- Divide the sum obtained in the first step by the total number of semester hours represented by the courses.

A "Semester QPA" is computed by including only the courses of a single semester. The "Cumulative QPA" is computed by including all courses taken to date at Bloomsburg University. If a course has been successfully repeated at another accredited institution of higher education, the credits for the failure at Bloomsburg are deleted from the computation.

## Change of Grade

After a grade of A, B, C, D, or E has been reported to the Registrar's Office, it may be changed only through the grievance process or to correct a computational or clerical error. A recommendation for change of grade due to a computational or clerical error must be made in writing by the instructor and approved by the department chairperson and the dean of the appropriate college. When the grades of I and R are changed, only the approval of the department chairperson is required.

## Course Repeat Policy

A maximum of four courses (not more than 13 semester hours) in which grades of D or E have been recorded may be repeated. The initial grade remains on the transcript and is part of the student's permanent record. Quality points are awarded for the grade of the repeated course only. The grade of the repeated course is part of the permanent record and is used to calculate the student's quality point average. Multiple repeats of the same course are considered as one repeat. A course taken at Bloomsburg University in which a grade of D or E has been earned and repeated at another accredited institution of higher education is included in the permitted maximum number of repeats.

## Withdrawal from a Course

Any student except a first semester freshman may drop a course during the schedule change period (the first five days

of the semester). When a course is dropped, it is removed from the student's schedule entirely. However, a student may not add a course except under circumstances noted in the **Registration and Scheduling** sections. After the schedule change period and continuing until one week past the middle of the semester, if a student withdraws from a course a grade of W will be recorded. As a means of notification to the instructor of the intent to withdraw, a student is required to obtain the instructor's signature on a withdrawal form.

No withdrawals will be permitted after the close of the business day one week after the middle day of the semester.

Prior to the last week of classes, in exceptional circumstances and for compelling and justified reasons, the dean of the college in which the course is being taught may waive these restrictions.

A limit of four withdrawals during the degree program shall apply. (Withdrawal from the university is an exception.)

## Withdrawal from the University

A student may withdraw from the university by securing the preliminary withdrawal form at the Center for Counseling and Human Development, Room 17, Ben Franklin Hall at which time the student will receive information and exit counseling regarding withdrawal.

The student then presents the preliminary withdrawal form to the Office of the Registrar, Room 6, Ben Franklin Hall, at which time the registrar will process the official withdrawal.

Students withdrawing in absentia must submit a written request to the registrar.

When students withdraw during a semester, the grade of W is recorded for each of the courses on the student's schedule if the withdrawal occurs prior to the beginning of the final examination period. Students may not withdraw during the final examination period.

The effective date of an official withdrawal is the date on which the student signs an official withdrawal form in the Registrar's Office or the date on which the written request is received by the registrar for a student withdrawing in absentia.

Students failing to register for the next semester are classified as withdrawn and must apply for readmission. Non-degree students may continue to register without readmission provided their next registration is within four semesters of their last enrollment.

An individual who discontinues attendance without clearing all obligations to the university waives the right to a transcript and future readmission until all obligations are cleared.

Policies which cover reimbursements are stated in the section on **Miscellaneous Fees**.

In addition to withdrawing from the university, students may be absent for extended periods of time. The categories include:

*Temporary Withdrawal* is granted by the Admissions Office after a student completes the withdrawal procedures and when the student files a temporary withdrawal form with the Admissions Office. Refer to **Temporary Withdrawal** in the **Admission and Readmission** section.

*Clinical Experience* absence is authorized by the registrar when a student is participating in the clinical year of the

medical technology program. Students in this category are not charged fees by the university during the time of their clinical experience at a cooperating hospital.

*Study Abroad* absence is authorized by the registrar when a student is participating in a university sanctioned exchange program with a cooperating university abroad. The student may be charged fees in accordance with the agreement with the cooperating university.

*Completing Degree Elsewhere* absence is authorized by the registrar when a student receives permission from his or her adviser and dean to complete course requirements at an approved institution other than Bloomsburg University.

*Mandatory Leave* is recorded by the registrar when a student is required to leave the university due to medical and/or psychological reasons or is suspended.

## Evaluation of Transfer Credits

College-level courses completed at an accredited two- or four-year college or university in which grades of C or higher were earned are usually transferred for a degree student. A course in which a grade of D was earned transfers only if the overall Quality Point Average at the school where the course work was completed is 2.0 or better on a 4.0 system. In either case, courses transfer; grades, quality points, and Quality Point Averages do not transfer. Transfer credits will be deleted if a student subsequently registers for courses which substantially duplicate the content of courses accepted in transfer.

A student applying to transfer courses must fulfill the provisions of the sections on **Residence Requirements** and **Graduation Requirements**.

When substitution of transfer credit for a required course is in question because the course was taken at an unaccredited institution or because the description or standards of the course are unclear, a student is entitled to an opportunity to validate the course by examination. When they are available, standardized examinations are used. (See the section on **Credit by Examination**.)

Correspondence courses, the total of which does not exceed 15 semester hours, are subject to acceptance. The courses must be from an accredited college or university and offered within a baccalaureate degree curriculum.

Courses taken at another institution on a pass-fail basis are acceptable if they conform to the conditions for such grades at Bloomsburg.

Credits from other accredited institutions earned by a Bloomsburg degree student will transfer provided approvals are obtained first from the student's adviser, department chairperson, and dean. An approval form can be obtained from the registrar. Upon completion of a course, it is the student's responsibility to provide the registrar with an official transcript. Course evaluations by department chairpersons plus approval from the dean must be secured before the registrar can record courses and credits on the student's academic record.

Evaluation of credit earned at other institutions by transfer students and by readmitted students who earned credit subsequent to their prior enrollment at Bloomsburg is made in the Admissions Office with guidelines provided by a department chairperson, cooperatively established by a college dean.

A transfer student is issued an evaluation sheet that stipulates the requirements for graduation which remain to be met. This is subject to revision in the light of subsequent changes in the evaluation of the transcript.

## Academic Standing and Retention

### Academic Good Standing

A student whose record at any final grading period shows a cumulative Quality Point Average of 2.00 or better is considered in academic good standing. (There are three final grading periods, fall semester, spring semester, and the total summer session.)

### Satisfactory Progress

Satisfactory progress is evaluated on the basis of two criteria:

- A student's ability to earn a minimum of credit hours;
- A student's ability to maintain a minimum quality point average at the conclusion of each grading period.

Full-time, continuously enrolled undergraduate degree students, in order to maintain satisfactory progress toward the completion of a degree, must earn a minimum of 24 credit hours in any given 12-month period (including credit hours earned in developmental studies courses).

Part-time undergraduate degree students, in order to maintain satisfactory progress within any 12-month period, must earn half of all credit hours attempted for up to 8 credit hours; two-thirds of all credit hours attempted for 9 or more credit hours. (*Note:* Hours earned for a repeated undergraduate course are not counted twice.)

To maintain satisfactory progress, a student must meet the following minimal requirements:

Total of semester hours earned (includes grades of P and transfer credits)	Cumulative Quality Point Average required for minimal progress
1-16 semester hours	1.25-1.99
17-32 semester hours	1.65-1.99
33-48 semester hours	1.85-1.99
49-64 semester hours	1.95-1.99
65 or more semester hours	2.00

A student, while making minimal progress toward academic good standing, may schedule no more than 16 semester hours.

### Dean's List

A full-time degree student whose semester QPA is 3.5 or higher in 12 or more semester hours of course work will be named to the dean's list for that semester. Grades of P or F do not enter the computation of a student's QPA.

### Academic Probation

An undergraduate student in one of the following categories is permitted to attend the university on academic proba-

tion for one additional final grading period (a semester or summer) and is limited to 16 semester hours:

- An entering freshman whose Quality Point Average (QPA) at the end of his or her first final grade period is at least 1.00 but less than 1.25;
- A transfer student whose QPA at her or his first final grading period is less than, but within 0.25 of the cumulative QPA required for minimal progress;
- A student who has been meeting the requirement for at least two consecutive grading periods immediately prior to a grading period in which his or her cumulative QPA drops below, but within 0.1 of the cumulative QPA required for minimal progress;
- A full-time freshman or transfer student who was making minimal progress toward good standing at the end of the second grading period is below but within 0.1 of that required for minimal progress toward good standing;
- A readmitted student who was formerly dismissed for academic deficiency who at the end of the first grading period has not regained minimal academic progress or good standing.
- A full-time student who failed to earn 24 semester hours within one 12-month period;
- A part-time student who failed to earn the minimum number of semester hours as prescribed above within the given semester.

### Academic Dismissal

A student who at any final grading period is not in good standing, making minimal progress toward good standing, or qualified to attend for a semester on academic probation is excluded from registration, and his or her record is marked "academic dismissal."

A student under academic dismissal is ineligible to attend any courses offered for a period of at least one calendar year. Readmission regulations are stated in the section on **Readmission of Former Students**.

Students failing to meet the minimal requirements of earned credit hours and/or QPA will be notified by the Office of the Registrar.

### Appeals

A student under academic dismissal may petition the Academic Review Board for reinstatement. If reinstatement is granted, the conditions of reinstatement are indicated including an enrollment limit of 13 semester hours for a specified period of time. The student's record also is marked *committee reinstated*. If the student does not attain good standing or is not making minimal progress toward academic good standing by the end of the period granted by the conditions of reinstatement, he or she is excluded from further registration, and his or her record is again marked "academic dismissal."

Petitions to the Academic Review Board *must be in writing* and received by the chairperson of the Academic Review Board within 48 hours of receipt of official notification of dismissal.

The Academic Review Board is comprised of the deans of Arts and Sciences, Business, and Professional Studies; dean of enrollment management, dean of extended programs; coordinator of academic advisement; registrar; director of the Center for Counseling and Human Development; and a representative of the vice president for student life. At the initiative of either the applicant or the Academic Review Board, the student's adviser will be invited to participate as a voting member in the consideration of the case.

In its evaluation of a petition for reinstatement, the board is charged to consider the degree to which external factors beyond the student's control temporarily prevented optimum academic achievement; the likelihood that these or similar factors would not recur if reinstatement were granted; the likelihood that the student, if reinstated, could complete his or her curriculum successfully within a reasonable extension of the normal four-year period; and an evaluation of the plan for attaining good standing proposed by the student. A decision of the Academic Review Board is final and not subject to review.

## Graduation and Degrees

### Graduation Requirements

Graduation requires the successful completion of at least 128 semester hours to include completion of the curriculum of an approved major program, completion of general education requirements, and an average of 2.0 in all courses required by the major program.

The last 64 semester hours of credit toward graduation must be in courses taken in an accredited four-year, degree-granting institution. At least 32 of the last 64 semester hours credited toward a baccalaureate degree must be Bloomsburg University courses. Exceptions to this policy will be made only by a college dean with the recommendation of the appropriate department chairperson. All financial obligations to the university must have been cleared.

### Honors

The Latin designations *summa cum laude*, *magna cum laude*, and *cum laude* are used to identify honor graduates.

- Graduating seniors having cumulative Quality Point Averages between 3.95 and 4.00 are designated *summa cum laude*.

- All those graduating seniors having cumulative Quality Point Averages between 3.75 and 3.94 are designated as *magna cum laude*.

- All those graduating seniors having cumulative Quality Point Averages between 3.50 and 3.74 are designated as *cum laude*.

Honors for graduation will be as of the last previous semester, while honors for transcripts and diplomas will be as of the end of the final semester.

A student must take 48 credits in residence at Bloomsburg University in order to be considered for academic honors at commencement.

At the spring commencement ceremony, the graduate in each college who has earned the highest academic average of

current spring graduates within the college shall receive a diploma on behalf of all graduates from that college. This honored graduate must have earned (prior to the final semester) at least 64 semester hours of credit at the university. In the case of a tie, all top graduates will participate.

### Multiple Degrees

A student can be awarded only one baccalaureate degree at a time. The degree to be awarded must be selected prior to the last semester. A student completing an additional major in another degree program will have the fact noted on her or his transcript.

### Associate Degree

Except as provided otherwise in this section, all of the preceding academic policies and practices apply to the associate degree. With respect to advanced placement, pass-fail, repeating courses, course withdrawal, and residence requirement, the policy is limited to 50 percent of the number of courses or credits indicated.

### Academic Examination Policy

- Faculty shall give examinations during the regularly scheduled classes of the semester. The faculty are responsible for determining the length, frequency, form, and content of all examinations within the guidelines listed below. Final examinations shall be given where applicable only during the designated final examination week after the end of regularly scheduled classes and only at the designated time and place according to the final examination schedule.

- Faculty shall distribute in writing the requirements for each course within the first week of each academic term. In these requirements, final examinations shall be worth no less than 20 percent nor more than 40 percent of the course grade. No single exam, paper, project, or assignment shall have greater emphasis than the final examination. As a result of this condition, every course must use at least three evaluations for grading purposes.

- Faculty shall give final examinations, which are comprehensive in design, emphasizing subject matter presented over the entire term.

- Faculty shall return and/or permit students to review all unit tests, quizzes, and other types of evaluations by the last regularly scheduled class in the term. In order to prevent an excessive build-up in the number of unit tests for each student during the last week of classes, faculty are advised to refrain from testing during that week.

- The final examination schedule shall be prepared by the Office of the Registrar with consultation of the faculty, if necessary, and approved by the provost and vice president for academic affairs. Regularly scheduled final examination periods shall be 120 minutes in length. Part of the final examination week shall include at least a one-day interval between the last full day of classes and the first day of scheduled examinations. This time shall be designated as the reading period.

- The following restrictions are imposed on the scheduling of activities during final examination week:
  - Faculty are not required to be available to students for conferences during final examination week.
  - No examinations shall be scheduled during the reading period unless approved by the provost and vice president for academic affairs.
  - No extracurricular activities or faculty-administrative activities shall be scheduled except with the consent of the individuals involved.

• The Andruss Library will remain open, and other designated study areas will be made available during the final examination period with expanded hours when possible.

• Unless returned to the student, all graded final examinations must be available for student review for at least the next full semester following the final examination.

• No student shall be required to take more than two final examinations in one day. (See the section on **Procedures** below for rescheduling of final examinations.)

• Any exceptions to any of the above matters must be made on the basis of the procedures outlined below.

• In case of noncompliance with the provisions of this policy, a student has the recourse of proper grievance procedures as established by the university.

• During summer sessions, the last class period of each course shall be designated as the final examination period with the time period for the examination not to exceed 80 minutes unless the arrangements have been made in advance so that they can be announced at the first meeting of the class. Except in unusual circumstances, classes in six-week sessions shall have the final examination on the last day of the course. Final examinations for courses scheduled in three-week sessions shall be held during the last of the two class periods scheduled for the last day. Classes in the nine-week sessions shall hold final examinations on the last scheduled class day with the period extended to 80 minutes for that class.

## Procedures

• Faculty who wish to schedule quizzes, tests, or examinations at times other than during their regularly scheduled class periods during the term may do so only if a make-up opportunity is made available to students. This opportunity must be scheduled at a time mutually acceptable to both student and faculty and may not conflict with the student's other scheduled classes. A faculty member shall not give an examination at a time other than during a regularly scheduled class period unless approval is first obtained from the majority of the faculty members of his or her academic department. Except for abnormal circumstances, this approval should be granted by the end of the first week of classes. Notification of this alternative arrangement shall be given to the appropriate college dean.

• A faculty member who believes that the content of her or his course does not lend itself to a scheduled examination must obtain approval for an alternative arrangement from the majority of the members of his or her academic department and college dean. Notification of the approved arrangement shall be given to the Office of the Registrar. Except for

abnormal circumstances, the approval and notification shall be made by the end of the first week of classes.

• To change the requirement specifying that final examinations shall be worth no less than 20 percent nor more than 40 percent of the course grade, there must be agreement for the change by the faculty member(s) in charge of the class, a majority of the members of his or her academic department, and the appropriate college dean. Except for abnormal circumstances, the approval and notification to students shall be made by the end of the first week of classes. If approved, the change may remain in effect for the faculty member for the duration of this policy or until the course is resubmitted as a Category I - Course Content Change.

• In order to change the time and place scheduled for a final examination, there must be agreement for the change by the faculty members(s) in charge of the class, 100 percent of the students in the class, and the appropriate college dean. This change must be made by the middle of the semester. Student opinion in this matter shall be determined by secret ballot with the faculty member in charge of the vote. If for some reason a change is made in the time and date of a final examination that results in a student conflict, the faculty member shall arrange to provide a make-up opportunity during the final examination period (see below).

• If the student has a scheduling conflict during the final examination period resulting in an excessive number of final examinations scheduled for one day, the following procedure for rescheduling the final examination shall apply and be completed by at least two weeks before the end of regularly scheduled classes. The student should select two of the scheduled examinations to be taken during the designated time according to the following priority of choice:

—Courses offered by the major department

—Additional required courses in the major program

—Other courses.

• The additional final examination(s) should be rescheduled with consultation of the relevant faculty on a mutually convenient time. Assistance in the rescheduling of examinations may come from such individuals as the student's adviser, department chairperson, or academic dean.

## Academic Dishonesty Policy

Students are expected to be honest in all their academic work; this means they will not engage in any of the following acts:

• Cheating on examinations including nonauthorized use of books or notes, use of crib sheets, copying from other student's papers, exchanging information with another student orally or by signals, obtaining a copy of the examination illegally, and other similar activities.

• Plagiarism in term papers, themes, essays, reports, take-home examinations, etc. (To plagiarize is to steal or use without acknowledgment the ideas, words, formulas, computer programs, etc. of another person.)

• Falsifications including forging signatures, altering answers after they have been graded, insertion of answers after the fact, erasure of a grader's marking, etc.

A faculty member who believes that a student has been academically dishonest in his or her classes should use the procedures set forth below to resolve the matter.

A student found guilty of academic dishonesty may be subjected to a full range of penalties from reprimand to expulsion from the university.

## Procedures

A faculty member who has discovered an act of academic dishonesty on the part of his or her student may:

- Reprimand the student orally or in writing. Copies of any written reprimand will not go beyond the student and the faculty member. A faculty member also is authorized to assign the grade of E to all work tainted by the academic dishonesty. A student may file a grievance against this action.
- File a written complaint against the student with the Student-Faculty Judicial Board. The complaint must describe academic dishonesty that is alleged to have taken place and must request that the matter be shared by the board.

All subsequent procedures shall follow those of the judicial system.

## Academic Advisement

Incoming students, who indicate and are offered admission to their preferred curriculum, are assigned to faculty advisers who specialize in advisement in these areas. Assignments to advisers are made by the coordinator of academic advisement with advice of department chairperson and deans.

Applicants for admission who are undecided about their curriculum state *undeclared* on the application instead of specifying a curriculum. These applicants are considered general studies students and will declare a specific major at the appropriate time. These students are advised or assigned to advisers by the coordinator for academic advisement.

Students with questions or problems should seek assistance in the Office of Academic Advisement, Room 16, Benjamin Franklin Hall (389-4271).

## Change of Area of Study (Major)

A student who wishes to change from one area of study to another must file a request to do so in the Office of Academic Advisement.

Permission to enter the new area of study may require the written approval of the department chairperson in which it is offered. In this case, approval may depend upon such factors as overall grade point average, available space, and recommendations from departmental committees.

It must be very clearly pointed out that any declaration or change in the area of study (major, minor, career concentration, advisement area) must be officially recorded in the Office of Academic Advisement. It also must be done by the student and while school is in session.

In addition to the first major, which is the minimum required to graduate, a student also may declare a second major, a minor, a career concentration, or an advisement area.

Any combination is allowed as long as the student understands it may require additional time and/or credits to complete. The final verification of the completion of any of the above is provided by the department(s) or area(s) involved.

## Diagnostic Testing Program Policy

This policy applies to testing that is not a part of the admissions procedure or course requirements. The coordinator of academic advisement uses diagnostic test results to assist with appropriate course placement.

Students will be selected for diagnostic testing based upon their predicted freshman year grade point average or performance in courses at Bloomsburg University. A predicted freshman year QPA is calculated for each new freshman at the time of application to the university. New students with a predicted QPA less than 2.5 will be given diagnostic test(s). Students whose college QPA falls below 2.0 will be considered for diagnostic testing based upon their circumstances. The specific area(s) of diagnostic testing will be determined by the pattern of SAT scores and either high school or college achievement. Students selectively low in one of the admission testing areas (e.g., below SAT math of 450, SAT verbal of 430, or Test of Standard Written English of 43) will have diagnostic testing in areas which are selectively weak.

Results of these tests will be released to faculty and staff on a need-to-know basis only for diagnostic evaluation and remediation of the individual tested and/or evaluation of the testing program. This information will be released with appropriate interpretation to students and to other agencies as the student permits. These data may be released without student permission for research purposes with student anonymity assured.

Depending on the results of the review of the record and the diagnostic evaluation, an individual program may be provided.

If a student is identified and placed in a developmental course(s), the course(s) is considered a prerequisite before additional courses for credit can be taken in the corresponding area. Each student will be provided with a letter indicating course placement or the recommended resources available to assist them, such as tutorial services, tutorial labs, and the College Study Skills courses. Such developmental programs will be provided for a maximum of students within the budgetary limits of the university.

If a student is identified and placed in a developmental course(s), the course(s) is considered a prerequisite before additional courses for credit can be taken in the corresponding area. Each student will be provided with a letter indicating course placement or the recommended resources available to assist them, such as tutorial services, tutorial labs and the College Study Skills courses. Such developmental programs will be provided for a maximum of students within the budgetary limits of the university.

# **Developmental Instruction**

## **Faculty**

Associate Professor Jesse A. Bryan (chairperson); Assistant Professors Harold C. Ackerman, Barbara Bonham, Irvin Wright; Instructors Virgie Bryan, Vincent J. DeMelfi, James F. Mullen, Carol J. Venuto, Janice Walters

The Department of Developmental Instruction provides developmental courses and other supportive services that assist students in making the transition from high school to college. These courses and services help students to improve basic skills in reading, writing, and mathematics. All students, regardless of their current academic program or prior academic performance, may enroll in developmental courses offered by the department.

### ***Course Descriptions***

#### **DEVELOPMENTAL INSTRUCTION (Code 01)**

##### **01.011 DEVELOPMENTAL READING I**

**2 semester hours**

Course's major objective is to improve a student's reading ability to a level where he/she may enroll in Developmental Reading II. Instruction given on both a group and an individual basis. Weekly contacts provide individualized prescriptions. Two credits towards full-load status; grade counted in Quality Point Average (QPA). Credits do not apply toward graduation.

(Offered summer session only.)

##### **01.025 DEVELOPMENTAL READING II**

**3 semester hours**

Course presents major components of the reading process and emphasizes basic reading skills. Three credits towards full-load status; grade counted in QPA. Credits do not apply toward graduation. Prerequisite to College Reading and Study Skills for students scoring below the established cutoffs on the Nelson Denny Reading Test.

##### **01.041 BASIC WRITING**

**2 semester hours**

Course designed to improve spoken and written language and to enhance development of skills necessary for formal writing, particularly punctuation, sentence structure, and paragraph writing. Includes studies and measurements of the effectiveness of informal writing, advertising copy, and traditional learning. Product and process discussed and compared to various approaches to learning. Two credits towards full-load status; grade counted in the QPA. Credits do not apply toward graduation.

(Offered summer session only)

##### **01.060 DEVELOPMENTAL WRITING**

**3 semester hours**

Open to students who test below standard established by the university. Using writing and revising tasks, students learn

to control basic sentence patterns, improve grammar, mechanics, and spelling, and try basic rhetorical strategies in paragraphs. Three credits toward full-load status; grade counted in QPA. Credits do not apply toward graduation.

##### **01.071 BASIC MATHEMATICS**

**2 semester hours**

Geared for students with inadequate arithmetic skills. Study skill techniques and problem-solving strategies explored. Emphasizes basic computer literacy including the LOGO language, and uses computer-assisted instruction. Two credits toward full-load status; grade counted in QPA. Credits do not apply toward graduation.

(Offered summer session only)

##### **01.080 DEVELOPMENTAL MATHEMATICS**

**2 semester hours**

Course is recommended for students with minimal algebraic skills as evidenced by student preparation and results obtained in diagnostic tests. An individualized program in mathematics is designed for each student which may include operations of rational numbers, ratio, proportion, percent, geometric concepts, basic algebraic concepts and skills. Concepts may include beginning linear equations. Two credits toward full-load status; grade counted in QPA. Credits do not apply toward graduation.

##### **01.090 BASIC ALGEBRA**

**3 semester hours**

Emphasizes intermediate algebraic skills necessary if success is to be obtained in College Algebra. Topics include linear equations and functions, exponents and polynomials, factoring, rational expressions, and quadratic equations. Provides concepts and skills necessary for college-level math courses that build on a limited algebraic background. Three credits toward full-load status; grade counted in QPA. Credits do not apply toward graduation.

##### **01.100 COLLEGE STUDY SKILLS**

**1 semester hour**

Course designed to provide, formulate, and apply the methods and models of learning strategies. Principle focus on content area reading and study skills. Outside readings and discussion focus on the nature of learning and the individual's responsibility to learning. Product and process discussed and compared to various approaches to learning. Credit applies toward graduation.

##### **01.120 COLLEGE READING AND STUDY SKILLS**

**3 semester hours**

Course develops the complex reading and study skills essential for college learning. Focuses on content area reading and study strategies, reading flexibility, and critical reading skills. Outside readings focus on the nature of learning and the individual's responsibility to learning. Students may be required to use the reading lab for computerized vocabulary lessons and speed reading exercises. A student may not take both College Study Skills and College Reading and Study Skills. Credits apply toward graduation.

# Tutorial/504 Services

The Office of Tutorial/504 Services offers a wide range of services designed to support and enhance the performance of university students. Peer tutoring is available upon request in a variety of courses. This tutoring is provided by students who have distinguished themselves by superior academic performance. Any student wanting tutorial service need only to complete a brief application in order to obtain this free service.

Services available through the 504 function seek to assist those students who bring special needs to the university. Interpreters, notetakers, and readers are just a few examples of the services available for the physically challenged.

The office also serves as an advocate for students in issues of accommodation beyond the classroom and acts as liaison with various other campus offices. The office regularly contacts the state offices of Vocational Rehabilitation and Visual Services to ensure that students are receiving adequate support from both the university and other agencies. Candidates for admission to the university are encouraged to contact the office in conjunction with a visit to the Office of Admissions. The Office of Tutorial/504 Services is interested in providing prospective students with a clear and comprehensive discussion of what will be available to them if they should decide to enroll at the university.

## Student Support Services

Student Support Services is a federally funded program housed at Bloomsburg University. It is designed to provide students with academic support as well as career and academic advisement. The program also offers information and referrals in such areas as financial aid, career/graduate school selection, and personal counseling. Additionally, the program offers cultural, social, and personal enrichment through a variety of planned activities.

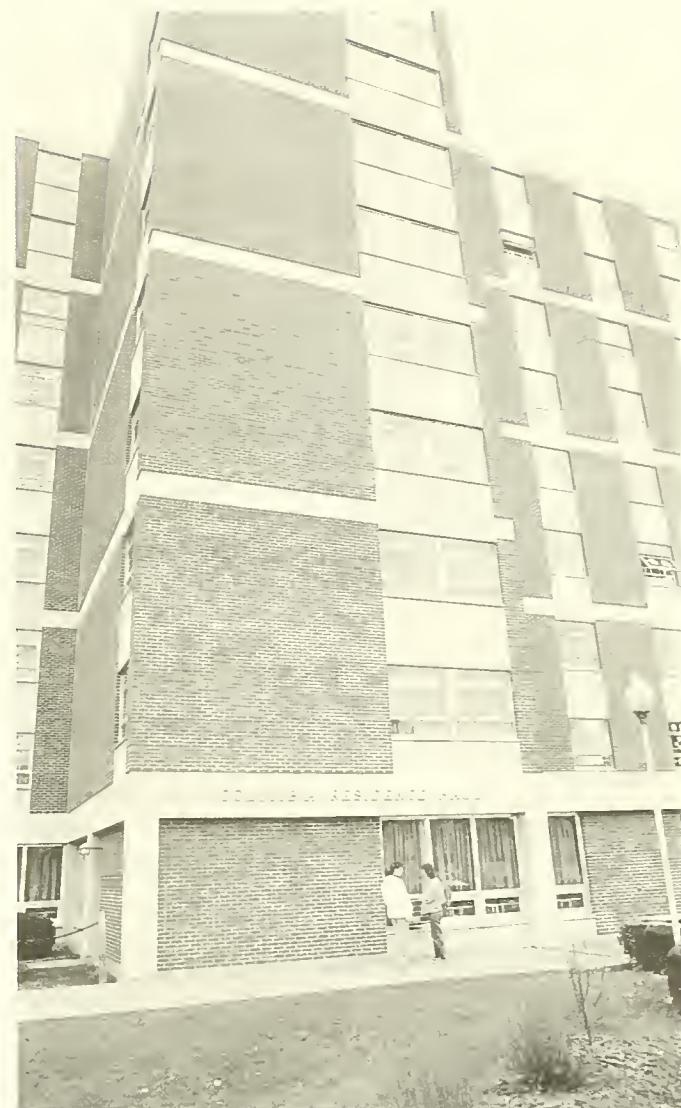
The nucleus of the program, however, is academic. Its offerings include professional tutorial services with assistance from master tutors who hold advanced degrees in their respective fields. The tutors are familiar with the curricula as well as course requirements at the university and can provide invaluable assistance to program participants.

The program offers tutoring in writing, literature, speech, mathematics, accounting, economics, reading/study skills, natural and social sciences.

General assistance is provided for correcting deficiencies, answering questions, clarifying concepts, reviewing materials, and preparing for tests.

Participants are selected from a varied pool of applicants. This pool includes summer and fall freshmen, older students returning to school (nontraditional students), and first generation college students, in addition to students who need academic and/or economic support.

The Student Support Services Office is located in Room 311 of Bakeless Center for the Humanities. For more information, call 389-4278.



## Upward Bound

The university presents the opportunity for ninth and tenth graders from affiliated high schools to enroll in its Upward Bound program. Participation may continue through the summer after high school graduation. The program, open to students meeting certain academic and financial requirements, is geared to promote self-confidence and to make students better informed and thus, better prepared for life beyond high school. Upward Bound's ultimate goal for its students is completion of a program of higher education.

The program consists of two parts. In the first segment, students spend two hours a week at their own high schools involved in academic experiences which supplement their regular scholastic program and improve their academic performance. The program's counseling service provides close individual contact for discussing career, vocational, and personal interests within the high school setting. The second component of Upward Bound is a six-week summer residential experience on the Bloomsburg University campus. This segment provides concentrated academic work plus planned recreational, social, and cultural experiences, both on and off the campus.

# **EXPENSES, FEES, AND REFUNDS**

*(Fees are subject to change without notice)*

## **Community Activities Fee**

The Community Activities fee of \$55 per semester is charged to each full-time undergraduate student. Part-time students taking course work on campus are required to pay the Community Activities fee at the rate of \$4.60 per credit hour. Community Activities fees finance student activities in athletics, recreation, music, lectures, student publications, general entertainment, student organizations, and other student-supported programs.

## **Basic Fees**

### **Full-Time Undergraduate In-State Residents**

The basic semester fee for full-time undergraduate students who are residents of Pennsylvania is \$915. An extra fee of \$76 per semester hour is charged for course loads in excess of 18 semester hours in any one semester.

### **Part-Time Undergraduate In-State Residents**

Undergraduate students who are Pennsylvania residents and who take fewer than 12 semester hours in one semester pay fees of \$76 per semester hour.

### **Full-Time Undergraduate Out-of-State Students**

Out-of-state undergraduate students pay fees per semester of \$1,633 for 12 to 18 semester hours. The definition of an out-of-state student may be obtained from the Admissions Office.

### **Part-Time Undergraduate Out-of-State Students**

Out-of-state undergraduate students who take fewer than 12 semester hours in a semester pay fees of \$136 per semester hour.

### **Graduate Students (In-State or Out-of-State Residents)**

In-state graduate students pay \$915 for 9 to 15 semester hours and \$102 per semester hour for less than 9 or in excess of 15 semester hours.

Out-of-state graduate students pay \$1,020 for 9 to 15 semester hours and \$113 per semester hour for less than 9 or in excess of 15 semester hours.

## **Summer Session Fees**

Undergraduate students pay \$76 per semester hour for summer session courses. Graduate students pay \$102 per semester hour. Summer session fees apply to both Pennsylvania residents and out-of-state students. The Community Activities fee is \$2 per week for all students taking undergraduate course work on campus.

## **Changes in Fees or Costs**

All fees or costs are subject to change without notice. If billing is prior to change, student accounts will be charged or refunded after the fact. Fees and other costs listed in this publication are those in effect or applicable on July 1, 1989.

Charges for dining hall meals are adjusted annually after the end of the academic year. The adjustment under the food service contract, currently in force, is based on the wholesale price index.

## **Housing Fees**

### **Residence Halls**

Accommodations during the academic year in a campus residence hall cost \$909 per semester for single occupancy, \$614 per semester for double occupancy, and \$562 for triple occupancy. The summer session housing fee is \$39 per week.

All students who live in the campus residence halls are required to take their meals in the campus dining hall under one of two food service plans during the academic year; \$418 per semester for 19 meals per week or, \$366 per semester for 15 meals per week. The summer session food service charge is \$30 per week for 19 meals and \$28 per week for 15 meals. Food service fees are payable with the housing fee as a combined charge. Housing and food service fees are the same for both Pennsylvania residents and out-of-state students.

## **Keys**

A fee of \$15 is charged for replacing a lost room key and \$5 for a mailbox key.

## **Advance Payment of Fees**

An advance registration fee of \$100 is payable when an individual is approved for admission as an undergraduate student or when a former student is approved for readmission. This fee is credited to the first basic fee payment.

The nonrefundable Community Activities fee for one semester (\$55) is payable when a student is approved for admission or when a former student is approved for readmission after being out of school for one or more semesters.

A nonrefundable Advance Housing Deposit of \$50 is required and payable to reserve a room accommodation and negotiate a housing contract for the academic year. This deposit must be paid prior to room assignment and is credited to the housing charge for the current semester.

## **Rules Governing Payment of Fees**

Bank drafts, post office money orders, or checks must be made out for the exact amount of the fee.

Fees—other than the activities fee—are payable to Bloomsburg University.

Activities fees are payable to Community Activities.

Fees are due at times determined by the Business Office or the Community Activities Office.

The university reserves the right to withhold information concerning the record of a student who is in arrears in fees or other charges including student loans.

The university does not offer a time payment plan. Billing statements of student accounts are mailed prior to registration each semester. Failure to comply with the directive concerning payment excludes the student from registration.

Inquiries concerning fees may be addressed to: Director of Accounting, Business Office, Waller Administration Building, Bloomsburg University, Bloomsburg, PA 17815.

## **Meals for Off-Campus Residents**

Students who live off campus may take their meals in the dining hall if space is available. The rate for 15 meals per week is \$366 per semester, 19 meals per week is \$418 per semester, 10 meals per week is \$327, and 5 meals per week, per semester, is \$212. (See the section on **Basic Fees**.)

## **Daily Rate for Transients**

The daily rate for transient meals and lodging is:

Breakfast	\$2.25	Dinner	\$4.10
Lunch	\$3.00	Room	\$5.00

Arrangements for room guests must be approved by the resident director of the hall where the guest will be housed.

## **Orientation Fees**

There is a one-time administrative orientation fee of \$20 payable at the time of the initial billing for all degree students. This fee is paid to the Business Office.

A participatory orientation fee is charged for the orientation program held on campus for new students. This fee is included with the registration for the orientation program and paid to the Orientation Office, 14 Benjamin Franklin Hall, Bloomsburg University, Bloomsburg, PA 17815.

Participatory orientation fee:

\$40	for fall freshmen
\$15	for fall transfer students
\$13	for summer freshmen
\$13	for developmental instruction students

(See the section on **Student Services** for more information on orientation.)

## **Miscellaneous Fees**

### **Diploma Fee**

A diploma fee is charged at graduation as follows: a bachelor's degree - \$10, a master's degree - \$10.

### **Transcript Fee**

A fee of \$2 is charged for each official transcript and \$1 for an unofficial transcript of a student's record.

### **Late Registration Fee**

A late registration fee of \$9 is charged to a student who completes registration after the official registration date.

### **Application Fee**

An application fee of \$15 must be paid by each applicant, undergraduate, and graduate at the time of request for registration.

### **Health Service Fee**

All students carrying 9 or more credits will be assessed a \$20 Health Service Fee per semester. Students scheduling 9 credit hours or less will not be assessed a Health Service Fee. All students enrolled in a summer session will be assessed a \$1 Health Service Fee for each week of that session.

Faculty and staff who schedule academic courses will not be assessed a Health Service Fee. Student teachers and/or students on internships not residing in the Bloomsburg area will not be assessed. They may request an exemption by sending a written request to the Registrar's Office. Students registered in extension courses will not be assessed a health fee.

Health services are available to only those students who pay a health fee.

The monies collected from this fee pay for the health services designated by the Pennsylvania Legislature as an auxiliary function of the institution. These funds are expended for the salaries of all individuals related to health services such as doctors and nurses, plus the cost of the hospital emergency room fee waiver contract, and other service contracts such as ambulance service, family planning, physical therapy services, medical supplies, utilities, and self-care unit.

### **Student Community Building Fee**

Students are charged a Student Community Building Fee of \$10 per semester for regular sessions, \$1 for a one- to three-week summer session, and \$2 for a four- to six-week summer session.

## Refund Policies

### Application Fee

The application fee (\$15) is not refundable.

### Advance Registration Fee

The advance registration fee (\$100) is not refundable.

### Basic Fee

Fees for tuition are eligible for refunds when a student withdraws from school. All refund requests must be submitted in writing to the Business Office in Waller Administration Building. A student is eligible for consideration for a refund for any reason approved by the president or the president's designated official or illness certified by a physician. The refund schedule also applies to part-time students. Except for forfeiture of advanced deposits listed above, refunds for basic fees will be based on the following schedule applicable after the first full class day:

1st through 2nd week	3rd week	4th week	5th week	after 5th week
80%	70%	60%	50%	No Refund

Refund schedule for the summer session is published in the *Summer Sessions Catalog*.

### Community Activities Fee

The Community Activities Fee (\$55), paid as part of the advance registration deposit, is not refundable.

### Other Fee Refunds

Refund policies for fees not specifically covered in the preceding statements are as follows:

No refunds are made when students are suspended, dismissed, or voluntarily withdraw from the university. The \$50 housing deposit is not refunded when housing contracts are broken due to voluntary withdrawals from school. Room fees are refunded on the same basis as basic fees.

In case of personal illness certified to by an attending physician or in case of other reasons which may be approved by the Council of Trustees, refunds of housing and contingent fees are prorated and the unused portion subject to refund.

### Notice of Withdrawal

In case of withdrawal, any refunds which are due are computed from the date when notice of official withdrawal is received at the Business Office.

### Books and Supplies

Books and supplies are estimated at \$170 for each semester. Students may secure books and supplies at the University Store. The store operates on a cash basis.

# STUDENT LIFE AND SERVICES

It is desirable for each student to become involved in extracurricular organizations and residence hall programs as these provide opportunities to learn and grow as a human being within an atmosphere of a living-learning center. Residence hall programming is intended as a framework for emotional, social, academic, and personal development; the programs involve dining service, social gatherings, cultural events, discussion groups, athletics, judicial proceedings, and a variety of student organizations.

Commuting students are urged to work out travel schedules which permit them to participate in activities and to spend as much time as possible on campus.

The educational value of these services depends upon the effort and involvement of each student, whether a resident or a commuter.

### University Policy

"Bloomsburg University of Pennsylvania exists for the transmission of knowledge, the pursuit of truth, the development of students, and the general well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community, students should be encouraged to develop the capacity for critical judgement and to engage in a sustained and independent search for truth."

This statement, quoted from the student handbook, *Pilot*, "Joint Statement on Rights, Freedoms, and Responsibilities of Students," has been acknowledged as a guiding principle in the normal operation of the institution. Students are responsible for understanding and abiding by the university's rules, policies, and regulations as stated in the *Undergraduate Catalog*, the *Pilot*, and the *Residence Hall Manual*. The extent to which a student's physical handicap limits his or her ability to comply with these requirements should be communicated to the Office of Health Services, McCormick Human Services Center, Bloomsburg University, Bloomsburg, PA 17815 (717) 389-4451/4452.

### Financial Aid

The financial aid programs available at Bloomsburg include grants, loans, part-time employment, and scholarships. Programs sponsored by the Federal Government include the Pell Grant, Supplemental Educational Opportunity Grant (SEOG), Perkins Loan (National Direct Student Loan), College Work-Study (CWS), Stafford Student Loan (formerly Guaranteed Student Loan), and "PLUS" loan programs as well as Supplemental Loans for Students (SLS). The Commonwealth of Pennsylvania-sponsored programs include PHEAA Grants, Higher Education Loan Plan (HELP), and Institutional (State) Student Employment. Other state agencies sponsor state grants and Guaranteed Student Loan and "PLUS" loan

programs. Students who are residents of states other than Pennsylvania should contact their state higher education department for further information.

Limited financial aid is available to continuing students through Bloomsburg University scholarships. Interested students should contact the Financial Aid Office.

All students wishing to apply for financial assistance must complete the Pennsylvania State Grant/Federal Student Aid Application. This application is available from the Financial Aid Office, high school guidance counselors, or the PHEAA, Towne House, Harrisburg, PA 17102. The university's financial aid booklet, *Bucks for Huskies*, outlines the various financial aid programs available and the application procedure for each. *Bucks for Huskies* is distributed to all Bloomsburg University students and is available upon request from the Financial Aid Office.

All financial aid programs are regulated by the Department of Education, the Pennsylvania Higher Education Assistance Agency (PHEAA), and/or Bloomsburg University policy. Accordingly, it is essential to understand that a student may lose financial aid by failing to maintain satisfactory progress towards completion of degree requirements as prescribed in the *Bucks for Huskies* booklet.

Further information concerning financial aid may be obtained by contacting the Office of Financial Aid, Room 19, Benjamin Franklin Hall, or by calling (717) 389-4297.

## Student Housing

### On-Campus Housing

Seven modern residence halls and an apartment complex comprise the university's on-campus residences accommodating a total of approximately 2,680 students. The residence halls are described in the section on **Buildings and Facilities**.

Although students' housing preferences are considered whenever possible, the university reserves the right to alter the composition of residence halls.

Housing and food services are provided on a combined basis only for students living in the residence halls. Students living in the apartment complex have the option of a meal plan. Housing and food service agreements are binding for the period indicated and may not be transferred or reassigned.

Freshmen under 21 years of age are required to reside on campus or to commute from the homes of their parents. If extenuating circumstances justify other housing arrangements, a written request for waiver of this residency requirement must be submitted to the Director of Residence Life, Luzerne Residence Hall, Bloomsburg University, Bloomsburg, PA 17815.

Transfer students, upon acceptance to the university and payment of the admissions fee, are eligible for on-campus housing.

Students must participate in an assignment process for housing on upper and lower campus in order to reserve a room for the following academic year. Eligibility requirements are subject to revision in response to changes in the enrollment figures and student demand for on-campus accommodations.

A limited number of spaces are available for graduate students.

Because of the type of housing, married students and/or students with families are not eligible for housing at this time.

Details about residence hall rules and regulations are printed in the *Pilot*, the *Residence Hall Manual*, the *Apartment Complex Handbook*, and the *Residence Hall and Apartment Complex Terms and Agreements*.

### Off-Campus Residency

Further information concerning on-campus or off-campus housing may be obtained by contacting the Residence Life Office at (717) 389-4089.

All off-campus residences are privately owned and operated and are considered "independent" student housing. **The university does not approve or recommend residences.** Student off-campus residences are subject to periodic inspection by officials of the Town of Bloomsburg, and dwellings with four or more tenants must meet the standards of the Pennsylvania Department of Labor and Industry.

Although students must rely on their own initiative to find suitable accommodations, the Residence Life Office collects data on off-campus housing opportunities, prepares housing and landlord directories, and provides other useful information of interest to student and faculty tenants and their landlords. Before any rental property in the Town of Bloomsburg is accepted for listing in the university housing directory, the owner must submit the premises to an inspection by the town Code Enforcement Office and sign a statement pledging to provide equal opportunity in the rental of the property.

Because the university does not assign students to off-campus residences, negotiations are the sole responsibility of students and their landlords. However, the Residence Life Office will gladly advise students on methods of solving such problems, and, if deemed appropriate, residence life personnel will mediate student-landlord disputes, but only on an informal, nonlegal basis.

Students planning to live off campus should have a clear understanding of their rights and responsibilities as tenants. Copies of model leases, apartment inventory checklists, departure notices, and town street maps are available to students. Upon request, residence life personnel will help student renters conduct pre- and post-occupancy inventories of their apartments. Off-campus students are advised to obtain insurance coverage for their belongings since most landlords do not assume liability for the loss of, or damage to, their tenants' personal property.

Students residing off-campus bear a dual responsibility as citizens of the Town of Bloomsburg and as members of the university community. The university cannot provide sanctuary from the law nor can it be indifferent to its reputation in the community it serves.

### Community Government Association

All full-time and part-time undergraduate students who have paid the Community Activities Fee are members of the Community Government Association. Graduate students, faculty, and staff members who have paid a Community

Activities Fee also are members. Student Senate meetings are held every other Monday evening in the Multi-Purpose Room of the Kehr Union Building. The executive council, which consists of the officers and two senators, meets on alternate Monday evenings.

## Student Organizations and Activities

### Organizations

Students are encouraged to take part in at least one extracurricular activity per semester. Approved student organizations are:

- A** Accounting Club  
Air Force ROTC  
American Chemical Society  
American Marketing Association  
American Society for Personnel Administration  
Anthropology Club  
Arnold Air Society  
Association for Childhood Education International  
Association of Hispanic Students  
Association of Public Relations Students
- B** Bacchus  
Bicycle Club  
Biology Club  
Black Cultural Society  
*Bloom Magazine*  
Bloomsburg Association of the Hearing Impaired  
Bloomsburg Fencing Club  
Bloomsburg Players  
Bloomsburg Student Concert Committee  
Bloomsburg Ultimate Disk Club  
Bloomsburg University Rugby Club  
Bloomsburg University Women's Soccer Club  
BUP Volleyball Club
- C** Campus Child Care Association  
Campus Scouts  
CARC (Columbia Association for Retarded Children)  
Catholic Campus Ministry  
Cheerleaders  
Chess Club  
Circle K  
College Republicans  
Columbia Residence Hall  
Community Arts Council  
Community Government Association  
Commuters Association  
Concert Choir  
Council for Exceptional Children
- E** Earth Science Club  
Economics Club  
Elwell Residence Hall  
English Club
- F** Fellowship of Christian Athletes  
Finance Club  
Forensic Society  
French Club
- H** Hillel  
History Club  
Husky Ambassadors  
Husky Singers
- I** Ice Hockey Club  
Image  
Intercollegiate Bowling Club  
International Relations Club  
Inter-Varsity Christian Fellowship
- K** Kehr Union Governing Board  
Kehr Union Program Board
- L** Life is for Everyone (LIFE)  
Luzerne Residence Hall  
Lycoming Residence Hall
- M** Madrigal Singers  
Maroon and Gold Band  
Mathematics Club  
Medical Technology Club  
Men's Lacrosse Club  
Montour Residence Hall  
Music Educators National Conference
- N** National Residence Hall Honorary  
Northumberland Residence Hall
- O** *Obiter*  
Off-Campus Housing Association
- P** Phi Beta Lambda  
Philosophy Club  
Planning Club  
Pre-Law Club  
Project Awareness Committee  
Protestant Campus Ministry  
Psychology Association
- Q** QUEST Student Leadership Group
- R** Radiologic Technology Club  
Residence Hall Association
- S** Schuylkill Residence Hall  
Ski Club  
Ski Racing Club  
Society for Collegiate Journalism  
Society of Physics Students  
Sophisticated Gents  
Spanish Club  
Student Art Association  
Student Nurses Association  
Student Organization for Adult Resources (SOAR)  
Student Speech and Hearing Association  
Student PSEA  
Student Trainer's Association  
Students Against Multiple Sclerosis  
Students of Sociology/Social Welfare  
Studio Band
- T** Table Tennis Club  
*The Voice*
- U** University-Community Orchestra  
Upward Bound Alumni Association
- V** Volleyball Club
- W** WBSC, WBUQ – radio stations  
Weightlifting Club  
Women's Choral Ensemble
- Y** Young Democrats

## Publications

Students who are interested in journalism have an opportunity to join the staffs of student publications and to take courses which lead to a Certificate in Journalism. Through this activity, a student can contribute significantly to campus life and at the same time gain valuable experience for future work in either commercial or school journalism. Requirements for the Certificate in Journalism are given in the section on the **College of Arts and Sciences**.

### THE VOICE

The university's student newspaper, *The Voice*, is published biweekly and is funded by the Community Government Association (CGA) and distributed free throughout the university community. Students are responsible for most of the written material and for the newspaper's production.

### OBITER

The *Obiter* is the annual yearbook and pictorial of activities and highlights at Bloomsburg University. It is funded by the CGA and is distributed free to members of the senior class upon graduation. Other members of the university community may purchase copies at the University Store.

### BLOOM MAGAZINE

*Bloom Magazine* reports on major events of the semester and also provides students with an outlet for their creative works. It is distributed at the end of every semester.

### PILOT

The official student handbook, the *Pilot*, is edited by students under the supervision of the dean of student life. It contains essential information about requirements, procedures, and policies established by the university.

### THIS WEEK AT BU

This weekly newsletter from the Student Development Office in the Kehr Union announces campus activities, events, and meetings and carries news of approved organizations.

## Honor and Professional Societies

National honor and professional societies foster educational ideas through scholarship, social activities, and moral development. Campus chapters are:

Alpha Psi Omega	Phi Sigma Iota
Beta Beta Beta	Phi Sigma Pi
Delta Mu Delta	Pi Kappa Delta
Delta Phi Alpha	Pi Omega Pi
Kappa Delta Pi	Psi Chi
Kappa Mu Epsilon	Sigma Tau Delta
Omicron Delta Epsilon	Tau Beta Sigma

## Social Fraternities and Sororities

The Inter-Fraternity Council (IFC) serves as the governing body of the nine social fraternities and coordinates rushing, pledging, and programming. The social fraternities and the dates of their organization are:

Beta Sigma Delta	1966	
Delta Pi	1967	
Gamma Epsilon Omicron	1986	
Kappa Alpha Psi	1981	Probationary *
Lambda Chi Alpha	1967	National 1970
Phi Sigma Xi	1966	
Sigma Iota Omega	1964	
Tau Kappa Epsilon	1976	National 1978
Theta Chi	1988	

The Inter-Sorority Council (ISC) is composed of representatives of the 11 social sororities. The council coordinates rushing and pledging activities and endeavors to enhance friendship and social relations between sororities and individual women. The social sororities are:

Alpha Kappa Alpha	1980	Probationary *
Alpha Sigma Alpha	1979	National 1979
Alpha Sigma Tau	1967	National 1979
Chi Sigma Rho	1967	
Chi Theta Pi	1986	
Delta Epsilon Beta	1966	
Phi Delta	1964	
Phi Iota Chi	1974	
Phi Sigma Sigma	1988	
Sigma Sigma Sigma	1967	National 1971
Theta Tau Omega	1968	

\* Probation means the organization has less than 15 members.

## Kehr Union

Kehr Union contains the following facilities:  
*ground floor* - Program Board Office, games room, campus post office, Presidents' Lounge, *The Voice* office, *Obiter* office, automatic banking machines, and television rooms;  
*first floor* - snack bar, multi-purpose rooms, travel office, information desk, duplicating and typing room, administrative offices, intramurals and recreation area, student sign shop;  
*second floor* - offices for student organizations, coffeehouse, conference rooms, listening/meditation room, and Community Activities Office.

The Program Board plans the activities held in the union; the Kehr Union Governing Board authorizes policies and procedures for use of the building and the University Store. For more details on activities, call the Kehr Union Information Desk at 389-3900.

# **Student Services**

## **Dining Room and Snack Bar**

The William W. Scranton Commons contains two main dining rooms that can be partitioned into four dining areas, each with a seating capacity of 250. Cafeteria-style food services are furnished by a professional food service contractor.

All students who are living in campus residence halls are required to purchase meal tickets. Off-campus students may apply to purchase meal tickets at the Business Office in Waller Administration Building.

Members of the university community may eat in the Scranton Commons at published transient rates. The Faculty and Staff Dining Room is open to university employees for lunch, Monday through Friday.

Group meals are available to campus organizations; these may be arranged through the food service vendor subject to approval of the Residence Life Office and the Business Office 48 hours in advance of the event. Banquets and parties for outside groups may be reserved through the same procedure 30 days in advance.

There are plans for a pizza shop on campus and a deli/convenience store on the upper campus. There is a snack bar in the Kehr Union Building which serves snacks and light meals to students, members of the university community, and visitors to the campus.

## **Health Services**

The University Health Center is located on the third floor of the McCormick Human Services Center. All students seeking health care or counseling about a health problem should report to the Health Center between the hours of 7 a.m. and 8:30 p.m. Monday through Thursday; 7 a.m. to 6 p.m. Friday, and 3 p.m. to 6 p.m. Sunday, or call 389-4451/4452. In an emergency, if the Health Center is closed, students may go directly to the Bloomsburg Hospital Emergency Room.

The University Health Center is a walk-in clinic staffed by registered nurses. Physicians, who are employed part time, treat students by appointment made by a staff nurse. Services received at the Health Center are free and covered by the health services fees. Medical services received at Bloomsburg Hospital and elsewhere are not free—with the exception of the Bloomsburg Hospital Emergency Room fee.

## **Absence Due to Illness**

If you are ill and choose to miss class, we advise you to contact all involved faculty as soon as possible, so an understanding can be reached between professor and student.

Faculty may call the Health Center to verify a student's treatment in the center if the student agrees to this release of information. In the case of severe illness for which the professional staff advises strict bedrest and/or hospitalization, the Health Center will contact all concerned faculty by written memo.

## **Ambulance Service and Medical Emergencies**

Ambulance service, which is paid for by the University Health Center, is available to Bloomsburg University students. Students may use this service if they are living in on-campus or off-campus housing, or if they are involved in an accident which occurs within a reasonable distance of the university.

In case of a medical emergency on campus, call the Bloomsburg Ambulance Association using the Columbia County emergency number (784-7911). After the ambulance has been called, contact Law Enforcement at 389-4168 to provide an escort for the ambulance to the emergency area.

When calling for assistance, be prepared to relay the following information:

1. The nature of the problem as you have observed it
2. Your location on campus
3. Your name
4. Your call-back number

The Health Services Program contracts for ambulance services. According to the present contract, the charge for this ambulance service per call is not billed except when the individual may have attempted suicide or is in a drug or an alcohol crisis. Some typical reasons for calling an ambulance include severe bleeding, breathing difficulties, allergic reaction, seizure, injuries due to a fall, and suspected heart attack. However, when in doubt, call for an ambulance. The ambulance transports directly to Bloomsburg Hospital Emergency Room.

## **Health Insurance**

All students who register for 9 or more credits must be covered by a health insurance plan. You may opt to purchase the current student health insurance plan or a plan of your own choice.

The student health insurance plan is designed to meet the needs of the insured individuals at the least possible cost, balancing necessary coverage with the ability of the student to pay. When considering our policy, review the plan carefully to determine if it adequately meets your health care needs.

Filing of claims will be the responsibility of the student. Claim forms are available at the University Health Center.

Application for the insurance plan will be mailed with registration materials or can be obtained at the health center.

Students must provide the University Health Center with accurate, current insurance information. On the reverse side of the student health insurance enrollment card is a form requesting information on your current plan. If you are not presently covered by health insurance, you may enroll in the student plan or buy another one with comparable coverage that will remain in force for the current academic year.

## **Insurance Coverage for Athletics**

All students participating in intercollegiate sports must have their own primary insurance coverage. As a supplement to the student's own plan, the Community Government Association provides a policy that acts as a supplement.

The basic benefits, under the athletic insurance program, are provided on an excess basis. This means the expenses will

be submitted to the parent's medical insurance plan prior to any payment or consideration by the university's company. Injuries requiring less than \$100 of medical expenses will be covered by the university's plan and need not be submitted to the parent's medical plan. The maximum benefit for injury to sound natural teeth is \$200 per tooth. Damage to temporary teeth (bridge, partial, etc.) is not covered.

In addition to the basic benefit plan, which covers up to \$25,000 in related expenses, all student athletes are covered under a Lifetime Catastrophic Insurance Plan. Under this plan, benefits would be payable for life with no limit on the total dollar amount, on expenses incurred, for hospital care, surgical services, extended care facilities, and rehabilitation services.

*Note:* Insurance coverage offered to students is based on negotiated contracts and therefore, is subject to change.

## **Center for Counseling and Human Development**

The Counseling Center assists students in developing their human growth potential and in adjusting to campus services through individual, group, and workshop formats in a variety of subject areas. Some of the areas include study skills, time management, assertiveness, effective communication, recognition of issues related to racism and sexism, human sexuality, drug and alcohol abuse, eating disorders (anorexia and bulimia), stress, relaxation, and many other topic areas which relate to daily living. Specialized counseling is provided for students participating in Act 101 and Educational Opportunity Programs. In addition to individual counseling, the counselors present outreach and group seminar-workshops in classes, residence halls, and other campus settings.

The center coordinates and directs two other major programs: orientation and institutional testing (GRE, NTE, MAT, CLEP, and PTCTP). Other center services include professional consultation for faculty and staff, initial counseling for permanent or temporary withdrawal from the university, and advisement for academic or nonacademic grievances.

All Counseling Center services and records are confidential. Release of any information to other persons and agencies is provided only with verbal and written consent of the student. There is only one exception to this and that is when a student is thought to be a danger to self or others.

The center is located in Room 17, Benjamin Franklin Hall, and is open weekdays from 8 a.m. to 4:30 p.m. Special appointments can be made for evenings and weekends. (After-hours contact with a counselor can be made through the office answering machine, 389-4255.) For appointments or additional information about services, call 389-4255.

## **Institutional Testing**

Specific state and national tests for special purposes are administered by the coordinator of testing upon request as a service to the Bloomsburg University community. Special requests should be made to the coordinator in Room 17, Benjamin Franklin Hall, or by calling 389-4255.

Tests such as the PTCTP (Pennsylvania Teachers Certification Testing Program), GRE, MAT, NTE, NLN Mobility II, and CLEP are administered on campus on a regular basis. Applications for these tests and the GMAT, LSAT, pharmacy and optometry tests are available at the Center for Counseling and Human Development, Room 17, Benjamin Franklin Hall. For additional information, contact the Center for Counseling and Human Development.

## **Orientation**

Bloomsburg University is committed to the belief that a positive beginning is critical to attaining the greatest possible benefit from a college education. Consistent with that belief, the university requires a comprehensive orientation program for all newly admitted students. These programs are administered through the Center for Counseling and Human Development.

Freshmen entering in the fall semester are required to participate in a summer orientation session. Parents and families are urged to attend on Sunday when several activities are scheduled for them. In addition to the freshman orientation, there is an orientation session for transfer students, adult/returning students, and summer freshmen. For students whose initial enrollment is in January, orientation is held on the Sunday prior to their first day of classes. Information about orientation and the university is sent to all new students when they have been accepted for enrollment and have paid their admission fees. Fall freshmen receive this information in early May.

Every effort is made to assign an orientation date that will accommodate those traveling from great distances or who have military obligations.

Due to the important nature of the testing and academic advisement/scheduling process, local students who may have visited the university prior to orientation will still be expected to participate fully in an orientation session.

At the university, enrollment involves much more than an educational endeavor. There are career, personal, and social concerns that students address, all of which are important to achieving a well-balanced college experience. Orientation helps to meet these concerns by providing for the initial contacts with faculty in the crucial academic advisement process; familiarizing students with the university; its personnel services, facilities, and students; promoting good human relations among people from varied racial, economic, and social backgrounds; and providing for completion of certain pre-enrollment matters involving scheduling, identification cards, meal tickets, and program evaluations.

Orientation helps students make a good beginning. However, students have the responsibility of familiarizing themselves with appropriate segments of the *Undergraduate Catalog* and the *Pilot* and with programs and policies pertinent to them. Assistance is available when problems or questions arise. For additional information, call the Orientation Office (389-4659) in Room 14, Benjamin Franklin Hall.

## **Student Grievances**

### **Academic Grievances**

Procedures have been established and are outlined in the *Pilot* to provide students with a system to register complaints of alleged academic injustices relating to grades or other unprofessional conduct in the traditional teacher/pupil relationship.

### **Nonacademic Grievances**

Procedures also are available and outlined in the *Pilot* to provide students with a system to register complaints of alleged injustices relating to violation, misinterpretation, or discriminatory application of nonacademic policies and procedures, and/or the conduct of professional, nonprofessional, and student employees.

## **Career Development Center**

The Career Development Center offers career counseling and planning services to undergraduate and graduate students, continuing education students, and Bloomsburg University alumni. In addition to individual counseling, an up-to-date career library containing printed materials and audiovisual equipment is available.

Career information and job-hunting seminars, workshops, and programs sponsored by the center are held throughout the year. DISCOVER, a computer-based, career guidance system, is available for students interested in making career decisions. Other services offered by the center include campus interviews, vacancy lists, and credential services.

## **Veterans' Affairs**

An office for veterans' affairs is maintained in the Office of the Registrar, Room 6, Benjamin Franklin Hall. It is staffed by work-study veterans whose duties consist primarily of certifying the enrollment of veterans and the dependents and widows of veterans to the Veterans Administration. The office also assists in education-related matters such as educational benefits from the Veterans Administration, tutoring, and financial aid.

## **University Store**

The University Store sells books, supplies, imprinted clothing, and many other sundry items. Routine hours are from 8 a.m. to 7:30 p.m., Monday through Thursday; 8 a.m. to 4:30 p.m., Friday; and 10:30 a.m. to 2:30 p.m., Saturday.

## **Campus Postal Service**

Mail is delivered to campus residence halls once a day, Monday through Friday. A central post office located in the Kehr Union provides combination mailboxes for off-campus and commuter students.

## **Community Arts Council**

The Community Arts Council is supported by the Community Government Association, the Bloomsburg University Foundation, the Community Patron Program, and the Pennsylvania Council on the Arts. The council consists of faculty members, students, and community representatives.

The Community Arts Council sponsors the Celebrity Artist Series. The events are open without charge (general admission seats) to faculty, staff, and students who purchase a Community Activities card. Area residents, faculty, and staff who purchase patron cards secure reserved seating. A cultural affairs schedule is published each fall. Patrons of the Community Arts Council receive periodic newsletters announcing cultural events and special activities.

## **Art on Campus**

Works of art can be found on exhibition throughout the year in the university's art gallery in Haas Center for the Arts. Under the direction of the Art Department, exhibitions are held monthly, and a special exhibition of student art work is held each spring.

The department also maintains a permanent art collection with more than 300 works of art displayed in buildings across the campus. Numerous pieces of sculpture adorn the walkways and gardens of the university's sprawling 173-acre site.

## **QUEST**

QUEST is an outdoor adventure program that serves the students, faculty, and staff of Bloomsburg University, as well as the general public. QUEST-sponsored programs are conducted mostly on weekends, holidays, and during school vacations, and consist of any or all of the following:

backpacking	whitewater rafting
rock climbing	winter camping
caving	snowshoeing
initiatives/	cross country skiing
new games	kayaking
bicycling	mountaineering
canoeing	ropes course

QUEST programs are designed to provide the participants with recreational, educational, and personal growth experiences through the excitement, challenge, and achievement experienced during these activities. QUEST offers a wide variety of activities depending upon the season of the year, yet all QUEST courses have three common denominators: learning, safety, and fun.

As a program of student life, QUEST also offers an outdoor leadership development program, an academic minor in outdoor leadership, an outdoor equipment rental center, and UpReach, a nine-day orientation program for new students that is conducted prior to the beginning of the fall semester. For more detailed information on QUEST and its varied programs, contact the QUEST Office in Simon Hall (389-4323).

## Athletics, Intramurals, and Recreation

The university is a member of the National Collegiate Athletic Association, the Eastern College Athletic Conference, the Pennsylvania State Athletic Conference, and the Eastern Wrestling League.

The intercollegiate program includes baseball, basketball, cross country, football, golf, soccer, swimming, tennis, track, and wrestling for men; and basketball, field hockey, cross country, lacrosse, softball, swimming, tennis, and track for women.

Men's intramural sports include baseball, tennis, track, cross country, horseshoes, soccer, water polo, weight training, softball, basketball, table tennis, volleyball, wrestling, gymnastics, golf, handball, racquetball, and straight pool.

Intramural sports for women include volleyball, basketball, badminton, table tennis, softball, horseshoes, flag football, bowling, tennis, racquetball, floor hockey, and aerobic exercise.

Intramural coeducational sports include tenquoit, volleyball, softball, tennis, horseshoes, golf, and racquetball.

When not occupied for instruction, intercollegiate athletics, or intramurals, athletic facilities are available for recreational use by students. These include an indoor track and tennis court, Nautilus equipment, a weight room and sauna, racquetball courts, two swimming pools, and a physical fitness center.

## Automobile Registration

Operation of a motor vehicle on the college campus is a privilege explained in the *Motor Vehicle Regulations Manual* available in the Office of Law Enforcement located on the ground floor of the University Store building.

In order for a resident student to have an automobile on the university campus, the student must be either 21 years-of-age or have earned 64 credits.

Special requests for permission to have a motor vehicle on campus from students not normally eligible are covered in Section 604 of the *Motor Vehicle Regulations Manual*.

Eligible university personnel desiring to operate and/or park a motor vehicle on campus in order to use school facilities are required to register their vehicles with the university and obtain from the Law Enforcement Office either a parking decal or a temporary permit when they arrival on campus. There is no grace period. Failure to adhere to this provision results in a \$5 penalty. Students may hold only one valid parking decal at a time; however, emergency situations may warrant issuance of a temporary permit.

If faculty, staff, or students bring an unregistered vehicle on campus for more than one day, they must obtain a temporary parking permit from the Law Enforcement Office. If staff, faculty, or students bring a substitute for a registered vehicle on campus for one day only, they are required to display a note on the dashboard indicating the operator's name, and the number and color of the registered vehicle's decal.

Residence hall juniors and seniors are eligible for permits to park in the lower end of Bloomsburg Hospital's lot adjacent to campus and Route 487. Green decals designate this area.

## Visitors' Parking

Visitors should obtain a visitors' parking permit from one of several offices on campus. Locations include Carver Hall, Waller Administration Building, Nelson Fieldhouse, Office of Law Enforcement, Navy Hall, Andruss Library, and Benjamin Franklin Hall.

On weekdays, overnight visitors must park in the hospital area and obtain a visitor's permit from the Law Enforcement Office. On weekends, there is open parking, and visitors may park in either red, black, or green areas.

A visitor cited for a parking violation who wishes to appeal the violation should report to the campus Law Enforcement Office with the ticket before leaving campus.



## Campus Child Center

The Bloomsburg University Campus Child Center is located on the lower level of Elwell Residence Hall. Its services provide care for the preschool children (ages 2 to 6) of university students and employees from 7:45 a.m. to 5 p.m. Monday through Friday (fall and spring semesters). Evening care is provided by appointment. School-age children (ages 6 to 10) are accepted for care when area public schools have a holiday and the university is in session. A summer program, designed for children ages 2 to 10, is also offered. Parents may use the center on a drop-in or full-time basis throughout the

year. However, all children must be registered in advance. Registration materials can be obtained at the center.

The Campus Child Center is licensed by the Pennsylvania State Department of Public Welfare. It is governed by the Pennsylvania State Day Care Service for Children Regulations. The Community Government Association provides funding to help support the center.

The center provides a nursery school program designed especially for the growth and development of the preschool child. Varied activities are planned to meet the social, emotional, cognitive, and physical needs of the child. The holistic, developmental approach provides the flexibility to meet individual differences. Quiet and active play, small and large group activities, snack, rest, and sleep are included. The curriculum is "child centered" providing numerous opportunities for the children to learn when they show interest and readiness. It is "teacher directed" through guidance and places an emphasis on creative learning, discovery, and exploration. The program provides opportunities to strengthen individual and cognitive processing abilities in order to prepare children for the academic learning that will take place in elementary school.

Operating fees for the center are as follows:

#### **Students**

##### *Community Activities Fee paid*

\$ .90 per hour for one child  
\$ .75 per hour for each additional child  
\$ 30 per week for full-time care  
*(5 or more hours a day)*

##### *Community Activities Fee not paid*

\$ 1.50 per hour for first child  
\$ 1 per hour for each additional child  
\$ 50 per week for full-time care  
*(5 or more hours a day)*

#### **Staff**

\$ 1.25 per hour for first child  
\$ .90 per hour for each additional child  
\$ 42.50 per week for full-time care  
*(5 or more hours a day)*

#### **Faculty**

\$ 1.50 per hour for first child  
\$ 1 per hour for each additional child  
\$ 50 per week for full-time care  
*(5 or more hours a day)*

Evening care follows hourly rates.

Operating fees are subject to change. The center's operating days follow the university calendar. For more information, contact Judy Coleman-Brinich, director of the Campus Child Center, at 389-4547.

# **UNDERGRADUATE CURRICULA**

The undergraduate curricula are administered by the three colleges: College of Arts and Sciences, College of Business, and College of Professional Studies. The requirements for the curricula are stated in the chapters which deal with these colleges.

Upon admission, students are admitted to eight broad academic categories. (See the section on **Application Procedures**.) A student must commit himself or herself to a specific major and receive admission to that program of study by the end of the sophomore year. (Students who transfer to Bloomsburg University with junior standing have a one-semester grace period on this requirement.)

When a student makes a tentative choice of a major she or he is assigned preliminary or prerequisite courses required in that major. In curricula where admission is selective or restrictive at the junior year entry-level, as in the case in several programs in the College of Professional Studies, the university is not bound to admit the student if he or she is not admissible according to the competition for available spaces or other selective criteria.

Students electing to major in two departments must have a major adviser in each department and meet all of the major requirements of each department and all of the general education requirements. (See the section on **General Education Requirements**.) Double majors in some departments may require more than the minimum 128 credits for graduation. Double majors in departments in two different schools must have the permission of both college deans to declare a double major.

#### **Credit**

Each curriculum that leads to a baccalaureate degree requires the successful completion of 128 semester hours of credit. A semester hour is ordinarily defined as the credit for one weekly period of 50 minutes of lecture, discussion, or recitation for one semester. In some cases as in laboratory, studio, or internship, there may not be a one-to-one correspondence between experimental time and credit.

#### **University Scholars Program**

William Baillie, director

The University Scholars Program provides a special academic experience for a preselected group of freshmen and sophomores. The program provides an appropriate challenge for students who have distinguished themselves educationally, have superior intellectual ability, set high standards for themselves, and are seriously pursuing a quality college education.

The scholars curriculum is designed to foster the growth of intellectual independence, creativity, and initiative; enhance analytical thinking and problem-solving abilities; augment interpretative abilities and communication skills; and develop

a sense of “common bonding.” The curriculum accomplishes these ends by offering a variety of courses and course designs including symposia, forums, independent study, and experiential study that require extensive reading, writing, and in depth study and research. The scholars courses are taught by university faculty who are designated scholars faculty due to distinguished scholarship, outstanding performance as teachers, and ability to relate to students.

The Scholars Program requires the completion of 24 semester hours of general education credit in designated scholars courses within the first two academic years. The remainder of courses in these years is selected from regular course offerings to satisfy major, minor, and other general education requirements. Scholars courses, while they satisfy general education requirements, are specially redesigned to emphasize the integration of interdisciplinary knowledge, concepts, and skills.

Although university scholars have many special programs and services at their disposal, they also will be fully integrated into the mainstream of the campus community so that they may enjoy the same dimensions of university life that other students experience including residence hall living, a wide array of cultural activities, campus leadership opportunities, sporting events, and other cocurricular programs.

## Eligibility for Admission

Scholars Program eligibility is based upon high school achievement, a ranking in the top 20 percent of the graduation class, and SAT scores of 1100 or more with a minimum score of 500 on both verbal and math subtests. Once eligible, high school seniors or graduates are selected on the basis of their application, essay, reference letters, and interview. Although high academic achievement provides eligibility, personal characteristics and extracurricular involvement are important in the selection process.

## Retention

Students admitted to the University Scholars Program must maintain a cumulative QPA of at least 3.0 to remain in the program. Students who do not attain this QPA in the first semester will be retained provisionally in the program with the stipulation that the 3.0 must be attained overall before the sophomore year.

At the completion of the program, a student who has maintained a minimum QPA of 3.50 or higher will be designated a University Scholar on his or her permanent record as well as on the diploma upon graduation.

At the end of the sophomore year, students may wish to apply to the upper-level Honors Program in their major discipline to continue in enhanced academic programs during their final two years.

# General Education Requirements

The goals of the general education program at Bloomsburg University are to develop:

- an ability to communicate effectively;
- an ability to think analytically and quantitatively;
- a facility to make independent and responsible value judgments and decisions according to high ethical values and life goals;
- an appreciation of the need for fitness, lifelong skills, and survival skills;
- a capacity for assessing the validity of ideas and an understanding of the approaches used to gain knowledge through development of critical thinking abilities;
- a greater appreciation of literature, art, music, and theater through stimulation of one's creative interests;
- an understanding of our society and the relative position of an individual in this society;
- an understanding of the relationship between an individual and his or her physical and biological environments;
- a familiarity with the major contributions of human knowledge in the humanities, social sciences, natural sciences, and mathematics;
- an awareness and global understanding of the relative position of the individual in the world community.

## Specific Requirements

### • Communication

**9 semester hours**

*(6 hours for students who complete English 104 )*

English 101 and English 200 or 201 (6 credits) or English 104 (3 credits). Students qualifying for English 104 are exempt from 20.200 or 20.201 upon successful completion of 20.104, thereby completing this requirement with 3 rather than 6 semester hours.

**3 or 6 semester hours**

3 credits from approved list of communication courses

**3 semester hours**

### • Quantitative-Analytical Reasoning

**3 semester hours**

3 credits from the approved list of quantitative-analytical reasoning courses.

### • Values, Ethics, and Responsible Decision Making

**3 semester hours**

3 credits from the approved list of values, ethics, and responsible decision-making courses. (The development of interdisciplinary courses such as technology, science, and human values is encouraged.)

- Survival, Fitness, and Recreation Skills  
3 semester hours

3 credits from the approved list of survival, fitness, and life-long recreation skill courses.

**TOTAL = 15 or 18 semester hours**

## Distribution Requirements

Distribution requirement courses must be from disciplines other than the individual's major. Students with double majors must adhere to this ruling for only one of the disciplines. Courses that a student uses to satisfy specific communication, quantitative-analytical reasoning, values-ethics, and survival-fitness-recreation requirements may not be used to satisfy distribution requirements.

- **Humanities**

**12 semester hours**

Chosen from courses approved as developing an understanding of approaches to gain knowledge in the humanities, creative interests in and appreciation of art, literature, music, and theater, knowledge of major contributions in the humanities, and global awareness.

At least three different humanities departments must be represented in these 12 credits. Humanities departments include art, English, history, languages and cultures, music, philosophy, communication studies, and mass communications.

- **Social Sciences**

**12 semester hours**

Chosen from courses approved as developing an understanding of approaches to gain knowledge in the social sciences, an understanding of our own society and the place of an individual in that society, knowledge of the major contributions in the social sciences, and global awareness.

At least three different departments must be represented in these 12 credits. Social sciences departments include anthropology, economics, geography, political science, psychology, and sociology and social welfare.

- **Natural Sciences and Mathematics**

**12 semester hours**

Twelve credits from courses approved as developing an understanding of approaches to gain knowledge in the natural sciences, an understanding of the relationship of the individual to his or her environment, and knowledge of the major contributions in the natural sciences and mathematics.

At least three different natural sciences and mathematics departments must be represented in these 12 credits. These departments include biological and allied health sciences, chemistry, earth science, mathematics, and physics.

**TOTAL = 51 or 54 semester hours**

# General Education Courses

## Specific Course Requirements

### Communication

**6 or 9 semester hours**

- 09.231 - Technical Writing
- 10.101 through 102 - French I and French II
- 10.203 through 204 - French III and French IV
- 10.205 - Applied Phonetics and Pronunciation
- 11.101 through 104 - German I through German IV
- 12.101 through 102 - Spanish I and Spanish II
- 12.203 through 204 - Spanish III and Spanish IV
- 12.205 - Phonetics: Theory and Practice
- 13.101 through 104 - Russian I through Russian IV
- 14.101 through 102 - Italian I and Italian II
- 18.101 and 102 - Latin I and Latin II
- \* 20.101 - Composition I and either
  - \* 20.200 - Writing Proficiency Examination or
  - \* 20.201 - Composition II
- \* 20.104 - Honors Composition is substituted for regular English composition requirements by students whose names are included on a list prepared by the English Department.
- 20.301 - Creative Writing
- 25.103 - Public Speaking
- 25.104 - Interpersonal Communication
- 74.153 - Introduction to Sign Language

### Quantitative-Analytical Reasoning

**3 semester hours**

- 40.246 - Business and Economics Math I
- 40.346 - Business and Economics Statistics I
- 45.260 - Basic Social Statistics
- 48.160 - Basic Statistics
- 53.101 - Mathematical Thinking
- 53.111 - Finite Mathematics
- 53.114 - College Algebra
- 53.118 - Applied Matrix Algebra
- 53.123 - Essentials of Calculus
- 53.125 - Analysis I
- 53.141 - Introduction to Statistics
- 53.241 - Probability and Statistics
- 56.110 - Introduction to Computer Science

### Values, Ethics, and Responsible Decision Making

**3 semester hours**

- 09.213 - Science, Technology, and Human Values
- 28.294 - Ethics Politics and Public Policy
- 28.220 - Ethics
- 28.290 - Medical Ethics
- 28.292 - Contemporary Moral Problems
- 41.105 - Environmental Issues/Choices
- 42.210 - Values Conflict 20th Century
- 42.215 - Global Issues in History-A Conflict of Values
- 44.207 - Ethics, Politics, and Public Policy
- 46.102 - Anthropology and World Problems
- 48.131 - Psychology of Adjustment
- 48.254 - Psychological Aspects Social Issues
- 50.230 - Human Sexuality
- 50.254 - Social Implications Biology

**Survival, Fitness, and Recreational Skills (3 credits)**

05.149 - Aquatics-Beginning, Non-Swimmers  
05.150 - Beginning Aquatics  
05.151 - Intermediate Aquatics  
05.155 - Gymnastics  
05.200 - CPR and Safety  
05.201 - Archery-Badminton  
05.214 - Fencing  
05.217 - Bicycling  
05.219 - Tennis  
05.222 - Creative Dance  
05.223 - Modern Dance  
05.224 - Fitness Dance  
05.227 - Archery-Volleyball  
05.228 - Gymnastics  
05.230 - Weight Training-Fitness  
05.231 - Archery  
05.232 - Bowling  
05.233 - Badminton  
05.234 - Golf  
05.235 - Riflery  
05.236 - Volleyball  
05.237 - Modified Physical Education  
05.238 - Racquetball/Handball  
05.239 - Square Dance  
05.240 - Fitness-Slimnastics  
05.241 - Judo/Self-Defense  
05.243 - Backpacking  
05.244 - Orienteering  
05.245 - Canoeing  
05.246 - Beginning Skin and SCUBA Diving  
05.247 - Basic Rock Climbing  
05.248 - Basic Sailing  
05.249 - Synchronized Swimming  
05.250 - Advanced Lifesaving  
05.270 - Exercise and You  
05.271 - Intermediate Archery  
05.272 - Intermediate Bowling  
05.273 - Intermediate Golf  
05.274 - Intermediate Tennis  
05.275 - Intermediate Volleyball  
05.276 - Intermediate Judo  
05.290 - Special Topics (1 credit only)  
05.298 - Fitness and Wellness (1 credit only)  
50.205 - Introduction to Nutrition (1 credit only)

## Specific Course Requirements

### GROUP A - HUMANITIES AND THE ARTS

#### Interdisciplinary Studies

09.171 - Scholars Seminar in Humanities

#### Art

30.101 - Introduction to Art  
31.215 - History of American Art  
31.225 - History of Architecture  
31.235 - Ancient and Medieval Art  
31.236 - Renaissance Impressionistic Art

31.345 - Art History of the Near Eastern  
31.346 - Art History of the Far East  
31.355 - History of Modern Art  
32.111 - Drawing I  
32.150 - Design I  
32.201 - Ceramics I  
32.221 - Fabric Design I  
32.231 - Painting I  
32.241 - Sculpture I  
32.251 - Weaving I  
32.261 - Graphics I  
32.275 - Crafts  
32.395 - Art and Culture of France

#### Communication Studies

25.103 - Public Speaking  
25.104 - Interpersonal Communication  
25.206 - Oral Interpretation of Literature  
25.220 - Intercultural Communication  
25.241 - Voice and Diction

#### English

20.120 - World Literature I  
20.121 - World Literature II  
20.131 - Bible as Literature  
20.151 - Introduction to Literature  
20.153 - Folklore  
20.220 - British Writers I  
20.221 - British Writers II  
20.222 - American Literature I  
20.223 - American Literature II  
20.231 - Literature and Society  
20.251 - Literary Genres  
20.280 - Poetry

#### History

42.100 - Trans-Atlantic World  
42.112 - Origins of the Modern World  
42.113 - Modern World  
42.121 - U.S. History to 1877  
42.122 - U.S. History 1877 - Present  
42.133 - Ancient and Medieval Worlds  
42.141 - Modern China and Japan  
42.142 - Latin America from European Colonization to the Present  
42.143 - Black Africa  
42.144 - Islamic and Hindu Worlds: Middle East and India: Malaysia  
42.208 - Contemporary Issues in U.S. History  
42.210 - Values in Conflict in 20th Century History  
42.222 - Growth of American Business  
42.223 - Economic History of the United States  
42.224 - Immigrant Experience  
42.227 - American Woman  
42.229 - Modern World Leaders  
42.250 - History of Science  
42.277 - History of Christian Religion  
42.281 - Military History I  
42.282 - Military History II

**Languages and Cultures**

- 10.101 - French I
- 10.102 - French II
- 10.203 - French III
- 10.204 - French IV
- 10.201 - Structure of the French Language
- 10.202 - Oral Expression 1 (French)
- 10.204 - French Studies Abroad
- 10.211 - Foundations of French Culture and Civilization
- 10.212 - France Today
- 10.295 - The Art and Culture of France
- 11.101 - German I
- 11.102 - German II
- 11.103 - German III
- 11.104 - German IV
- 11.201 - Grammar and Composition (German)
- 11.202 - Conversation (German)
- 11.204 - German Studies Abroad
- 11.211 - German Culture and Civilization I
- 11.212 - German Culture and Civilization II
- 12.101 - Spanish I
- 12.102 - Spanish II
- 12.203 - Spanish III
- 12.204 - Spanish IV
- 12.201 - Structure of the Spanish Language
- 12.204 - Spanish Studies Abroad
- 12.211 - Spanish Culture and Civilization
- 12.212 - Spanish-American Culture and Civilization
- 13.101 - Russian I
- 13.102 - Russian II
- 13.103 - Russian III
- 13.104 - Russian IV
- 14.101 - Italian I
- 14.102 - Italian II
- 18.101 - Latin I
- 18.102 - Latin II

**Mass Communications**

- 27.230 - Newswriting

**Music**

- 35.101 - Music Listening I
- 35.111 - Maroon and Gold Band
- 35.112 - Concert Choir
- 35.113 - Women's Choral Ensemble
- 35.114 - University-Community Orchestra
- 35.115 - Husky Singers
- 35.130 - Fundamental Musicianship
- 35.131 - Music Theory I
- 35.132 - Music Theory II
- 35.133 - Sight Singing I
- 35.134 - Sight Singing II
- 35.141 - Violin
- 35.142 - Viola
- 35.143 - Violoncello
- 35.144 - Double Bass
- 35.151 - Organ
- 35.161 - Trumpet
- 35.162 - Horn

35.163 - Trombone

35.164 - Baritone

35.165 - Tuba

35.171 - Voice

35.181 - Piano

35.191 - Flute

35.192 - Oboe

35.193 - Clarinet

35.194 - Bassoon

35.195 - Saxophone

35.196 - Percussion

35.221 - Music History I

35.222 - Music History II

35.223 - Music History III

35.224 - Class Piano I

35.225 - Class Piano II

35.226 - Class Voice

35.229 - Class Instruction in Brass

35.227 - Class Instruction in Strings

**Philosophy**

- 28.111 - Introduction to Philosophy
- 28.220 - Ethics
- 28.270 - Religions of the East
- 28.271 - Western Religious Tradition
- 28.303 - Philosophy of Science
- 28.304 - Philosophy of Social Science
- 28.221 - Plato and Aristotle
- 28.224 - Descartes to Kant
- 28.228 - Existentialism
- 28.351 - Theory of Knowledge

**Theater Arts**

- 26.102 - Introduction to Theater Arts
- 26.112 - Fundamentals of Acting
- 26.209 - Theater Appreciation
- 26.215 - History of the Theater

**GROUP B - SOCIAL AND BEHAVIORAL SCIENCES****Interdisciplinary Studies**

- 09.172 - Scholars Seminar in Social Science

**Anthropology**

- 46.101 - Introduction to Anthropology
- 46.102 - Anthropology and World Problems
- 46.200 - Principles of Cultural Anthropology
- 46.210 - Prehistoric Archaeology
- 46.220 - Principles of Physical Anthropology
- 46.260 - Men and Women: An Anthropological Perspective

**Communication Disorders**

- 74.152 - Introduction to Communication Disorders

**Economics**

- 40.211 - Principles of Economics I
- 40.212 - Principles of Economics II

**Geography**

- 41.101 - World Physical Geography
- 41.102 - World Cultural Geography
- 41.125 - Weather and Climate
- 41.150 - Elements of Planning
- 41.200 - Geography of U.S. and Canada
- 41.201 - Geography of Europe
- 41.202 - Geography of Latin America
- 41.221 - Economic Geography
- 41.242 - Map Skills
- 41.258 - Environmental Conservation
- 41.281 - Pennsylvania Folk Cultures

**Political Science**

- 44.101 - Elements of Political Science
- 44.108 - Contemporary Political Ideologies
- 44.120 - United States Government
- 44.160 - Nations, States, and Governments
- 44.181 - Contemporary Issues in World Politics
- 44.366 - Political Systems of Western Europe

**Psychology**

- 48.101 - General Psychology
- 48.110 - Life Span Psychology
- 48.131 - Psychology of Adjustment
- 48.211 - Child Psychology
- 48.212 - Adolescence Psychology
- 48.251 - Social Psychology
- 48.254 - Psychological Aspects of Social Issues

**Sociology and Social Welfare**

- 45.133 - Introduction to Social Work
- 45.211 - Principles of Sociology
- 45.213 - Contemporary Social Problems
- 45.215 - Ethnic and National Minority Groups
- 45.216 - Urban Sociology
- 45.219 - Religion and Society
- 45.231 - Marriage and Family
- 45.242 - Juvenile Delinquency
- 45.276 - Science and Society

**Special Education**

- 70.101 - Introduction to Exceptional Individuals

**GROUP C - NATURAL SCIENCES AND MATHEMATICS****Interdisciplinary Studies**

- 09-173 - Scholars Seminar in Natural Sciences and Mathematics

**Biological and Allied Health Sciences**

- 50.101 - General Biology I
- 50.102 - General Biology II
- 50.110 - Biology of Animals
- 50.111 - General Biology I Laboratory
- 50.120 - Biology of Plants
- 50.231 - Biology of Aging
- 50.240 - Introductory Microbiology

**Chemistry**

- 52.101 - Introductory Chemistry
- 52.108 - Physiological Chemistry
- 52.111 - General Chemistry I
- 52.112 - General Chemistry II
- 52.113 - Chemistry Laboratory
- 52.118 - University Chemistry

**Earth Science**

- 51.101 - Physical Geology
- 51.102 - Historical Geology
- 51.105 - Environmental Geology
- 51.111 - Physical Geology Laboratory
- 51.112 - Historical Geology Lab
- 51.255 - Meteorology
- 51.259 - Oceanography

**Mathematics**

- 53.101 - Mathematical Thinking
- 53.111 - Finite Mathematics
- 53.112 - Trigonometry
- 53.113 - Pre-Calculus
- 53.114 - College Algebra
- 53.118 - Applied Matrix Algebra
- 53.123 - Essentials of Calculus
- 53.125 - Analysis I
- 53.126 - Analysis II
- 53.141 - Introductory Statistics
- 53.201 - Theory of Arithmetic
- 53.202 - Geometry and LOGO for Elementary Teachers
- 53.231 - College Geometry
- 53.241 - Probability and Statistics

**Computer Science**

- 56.210 - Algorithmic Processes

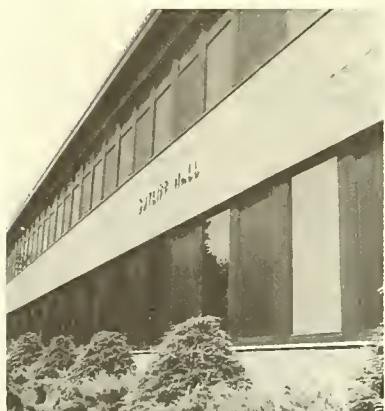
**Physics**

- 54.101 - Basic Physical Science
- 54.103 - Principles of Physical Science
- 54.104 - Elementary Electronics
- 54.105 - Energy: Sources and Environmental Efforts
- 54.106 - Science of Sound
- 54.107 - Applied Physics for Health Sciences
- 54.110 - Introduction to Astronomy
- 54.111 - Introductory Physics I
- 54.112 - Introductory Physics II
- 54.211 - General Physics I
- 54.212 - General Physics II

# Buildings and Facilities

Bloomsburg's campus is comprised of two tracts called the lower campus and upper campus with a total area of 173 acres.

The lower campus comprises the original campus and adjacent areas subsequently acquired. It contains several residence halls, dining hall, university store, administration buildings, auditorium, library, academic buildings, and recreation areas. The upper campus encompasses E. H. Nelson Fieldhouse, Redman Stadium, Litwhiler Field, and practice areas. Long-range plans presume further development of the upper campus for residential, academic, and recreational purposes.



## Instructional Buildings

**Bakeless Center for the Humanities**, completed in 1970, is an air-conditioned building containing classrooms, lecture halls, faculty offices, and an exhibit area. It is used primarily by the departments of English, art, languages and cultures, economics, and political science. The building was named for the Bakeless family including Professor Oscar H. Bakeless, a graduate of the school and former distinguished member of the faculty; his wife, Sara H. Bakeless, a graduate and former faculty member; their son, Dr. John E. Bakeless, a graduate, author, and a recipient of the Alumni Distinguished Service Award; their daughter, Mrs. Alex Bakeless Nason, a graduate and benefactor of the school; and their daughter-in-law, Mrs. Katherine L. Bakeless, graduate of the school and a nationally known author.

**Hartline Science Center**, completed in 1968, is an air-conditioned facility with modern classrooms, lecture halls, seminar rooms, laboratories, faculty offices, and an exhibit area; it accommodates the departments of chemistry, physics, biology, and geography and earth science.

The name of the building honors Daniel S. Hartline, a former teacher of biology, and his son, Dr. H. Keffer Hartline, a 1968 Nobel Prize laureate and recipient of an Alumni Distinguished Service Award.

**Sutliff Hall**, completed in 1960, contains classrooms and faculty offices of the College of Business. William Boyd Sutliff, for whom the building was named, was a teacher of mathematics and the first dean of instruction of Bloomsburg State Normal School. Capital budget legislation enacted in 1980 provided the funding for a complete renovation of Sutliff Hall which was completed in July 1987.

The university's newest instructional building, the **James H. McCormick Human Services Center**, was completed during the 1984-1985 academic year. It provides classrooms, laboratories, seminar rooms, and faculty offices for the College of Professional Studies' departments of nursing and curriculum and foundations and for Arts and Sciences' departments of communication studies, mathematics and computer

science, mass communications, psychology, and sociology and social welfare. It also houses the University Health Center and the Learning Resources Center, an autotutorial laboratory and educational media laboratory, as well as radio and television studios, a photography darkroom, and laboratories to support the rapidly expanding instructional technology services.

Also included in the building are the Curriculum Materials Center, laboratories for programs in elementary and secondary education, nursing, psychology, and sociology. A major new computer laboratory is located on the first floor of the building. In addition, the building contains a number of general-purpose classrooms and a multi-image projection room known as the University Forum.

**Benjamin Franklin Hall**, completed in 1930 for use as a campus laboratory school, is now used for administrative offices and the Computer Services Center.

**Navy Hall** was constructed in 1939 as a campus laboratory school but was converted during World War II for the use of candidates enlisted in the Navy V-12 Office Training Program. It now houses the Department of Communication Disorders and Special Education, the Reading Clinic, the Speech, Language, and Hearing Clinic, and a number of other classrooms and offices.

**Science Hall**, call "Old Science" to distinguish it from Hartline Science Center, was built in 1906. Completely renovated in 1988-89, it provides departmental offices for history, art, music, languages and cultures, and has several classrooms and studios.

**Centennial Gymnasium**, completed in 1939, contains a main gymnasium that seats 1,200, two auxiliary gyms, a swimming pool, an adaptive lab, and offices and classrooms for physical education and athletics.

**E. H. Nelson Fieldhouse** on the upper campus was completed in 1972. It serves as the university's main sports arena and seats 2,600 spectators. There is an indoor track, a six-lane swimming pool with seating for 500 spectators, faculty offices, handball courts, classrooms, equipment rooms, a nautilus room, and special facilities for physical training and therapy. The building is used for health and physical education classes, varsity athletic contests, recreational activities, and other events requiring seating of large audiences. Free bus transportation is provided regularly between this building and the lower campus.

Dr. E. H. Nelson, for whom the building is named, was for many years director of athletics at the university.

## Residence Halls, Dining Rooms, and Student Union

**Columbia Hall**, completed in 1970, is a seven-story residence hall housing 400 students. It contains lounges, study rooms, recreation areas, a special projects room, guest rooms, and an apartment for the residence director.

**Elwell Hall**, completed in 1968, is a nine-story residence hall that can accommodate 678 students. It has recreation rooms and lounges, guest rooms, study rooms, and apartments for staff. Its name honors Judge William Elwell, a former trustee; George E. Elwell, his son, a graduate and former trustee; and G. Edward Elwell, his grandson, a graduate and former French instructor.

**Luzerne Hall**, a four-story residence hall completed in 1967, accommodates 300 students. It has lounge and recreation areas, study rooms, and apartments for staff.

**Lycoming Hall**, the newest residence hall, was opened during the fall of 1976. In addition to housing 250 students, the building offers lounges, study rooms, recreation areas, special project facilities, and an apartment for the residence director.

**Montour and Schuylkill Halls** are four-story residential facilities completed in 1964. Each houses 250 students and is divided into two wings complete with recreation and lounge facilities, study rooms, and apartments for resident staff members.

**Northumberland Hall**, completed in 1960, accommodates 200 residents. There are lounge and recreation areas, study rooms, and apartments for staff members. The alignment of halls according to coed and single-sex residence is subject to revision based upon male/female enrollment figures and current student needs.

**William W. Scranton Commons**, completed in 1970, is an air-conditioned dining facility with 1,000 seats and a serving capacity of 2,900 students at each meal. Folding partitions permit flexibility of arrangements. A faculty/staff dining room and two lounges also are located in the building. It is named in honor of William W. Scranton, governor of Pennsylvania from 1963 to 1967.

**University Store**, completed in 1956, was used until 1970 as the college commons and from 1970 until 1973 as a temporary student union. The building has been remodeled and now serves as the University Store for the sale of textbooks and supplies and houses the Office of Law Enforcement.

**Marguerite W. Kehr Union** houses two formal lounges, a snack bar, and dining area, two multi-purpose rooms, a mailroom with mailboxes for commuting students, game room, television room, an information center, automatic bank teller, a travel service, offices for student organizations, and community activities offices. Its name honors the late Dr. Marguerite W. Kehr, dean of women from 1928 to 1953.

## Administration and Service Buildings

**Waller Administration Building**, completed in 1972, contains administrative and budget offices, University Relations and Communication Office, Personnel and Labor Relations Office, Office of Institutional Planning, Research,

and Information Management, Department of Developmental Instruction, Office of Affirmative Action, conference rooms, a centralized area for the Business Office, Affirmative Action Office, and an area for receiving, storing, and distributing university supplies and equipment. The building is named for D. J. Waller Jr., who served for 27 years as principal of the Normal School.

**Francis B. Haas Center for the Arts**, completed in 1967, has a 2,000-seat auditorium with its stage planned for dramatic productions as well as general auditorium purposes. There also are classrooms, offices, facilities for music, debating and drama groups, lounges, and exhibit areas. Dr. Francis B. Haas, for whom the auditorium was named, was president from 1927 to 1939. Prior to and following this period, he served as State Superintendent of Public Instruction in Pennsylvania.

**Carver Hall**, built in 1867, is the oldest building on the Bloomsburg campus. In addition to a 900-seat auditorium, Carver houses the Office of the President, Alumni Room, Development Office, Institutional Advancement Office, and Office of the Provost and Vice President for Academic Affairs.

**Buckalew Place**, originally the home of Charles R. Buckalew, a U. S. Senator from 1863 to 1869 and a trustee of the Normal School, was acquired by the Commonwealth for use as the president's home in 1926.

**Boyd F. Buckingham Campus Maintenance Center**, completed in 1970, houses offices, storage areas, and workshops used by the plant maintenance staff. The building is named in honor of Boyd F. Buckingham, vice president for administration from 1974 to 1981.

**Harvey A. Andruss Library**, completed in 1966, houses the university's extensive collection of bound volumes, microtexts, periodicals, and other source and reference materials for study and research. Dr. Harvey A. Andruss served as president of Bloomsburg University from 1939 to 1969. Dr. Andruss established the division of business education and served as dean of instruction prior to becoming president of the university.

**Magee Center**, former residence of the late industrialist Harry L. Magee, was donated to the university in September 1988, by the Magee Foundation. The building houses the offices of the School of Extended Programs and functions as the university's public service center. The two-story stone structure was built in 1946-47 on a large tract of land 1.5 miles west of lower campus. Its interior offers congenial surroundings for hosting university and community groups, conferences, training seminars, and other noncredit programs. Inquiries about the availability of the Magee Center should be directed to the School of Extended Programs, 700 West Main St., Bloomsburg, PA 17815, (717) 389-4004.

**Parking Garage**, a multi-level concrete structure completed in 1972, accommodates approximately 200 cars.

# UNIVERSITY SERVICES

## Library Services

Andruss Library, completed in 1966, houses the university's extensive collection of bound volumes, microtexts, periodicals, and other source and reference material for study and research. The library was named for Dr. Harvey A. Andruss who served as president of Bloomsburg from 1939 to 1969 and, who during nine years prior to becoming president, established the division of business education and served as dean of instruction.

The Andruss Library, a unit under the instructional services area, has a total collection of more than 1,575,000 items. This involves a book collection of more than 300,000 volumes including a large reference collection and more than a million microforms. The library also has federal, state, and local government documents. There is a collection of more than 5,600 phonograph records, a pamphlet file of approximately 7,600 items, and a juvenile/young adult book collection. A special collection of books located on the ground floor contains first editions, autographed copies, and illustrated books of value. The collection can be used during normal library hours.

Books and periodical articles may be borrowed from other cooperating libraries. Depending on the lending library, there may or may not be a charge for borrowing materials or for photocopies of articles. Inter-library loan requests may be initiated at the Readers' Services Desk on the main floor.

## General Collection

Harvey A. Andruss Library includes the university's collections of books, periodicals, phonodiscs, and some audio-visual resources. Other resources are located in the Learning Resources Center and the Curriculum Materials Center.

The library has 250,000 print volumes including 20,000 in its extensive reference collection and 30,000 bound periodical volumes. Microform resources total 1,450,000 units. Other general collections are government documents, phonograph records, juvenile and young adult collection, pamphlet file, and corporation report file.

Service desks that are responsible for assisting students with locating materials in the collections are the Circulation, Reserve, and Periodicals Service desks. The Periodicals Desk maintains the most current three years' issue of all the journals for which the library has subscriptions.

## **Special Collection**

This collection contains unusual and rare first editions, autographed books, and illustrated books.

## **University Archives**

University Archives is the depository for archival and other materials relating to the history of Bloomsburg University. It is located on the ground floor of Bakeless Center for the Humanities.

## **Public Access On-Line Catalog**

By early 1990 the library's on-line catalog will be implemented, beginning with citations to about 80 percent of the titles in the general collection. The catalog will be accessible from dormitories and by personal computer from off-campus. The public card catalog will contain records of books that are not yet in the on-line catalog database.

## **Reference and Instruction Services**

Faculty librarians at the Readers' Services Desk are available 79 hours each semester week to assist students with research methodology and the use of information resources. An interactive video program, a self-operated slide/tape presentation, and topical research guides are available to assist students in learning to use the library. Bibliographic instruction is provided to classes by the library faculty.

## **Interlibrary Loan**

Books and periodical articles not available in the library's collections may be borrowed from other libraries, usually without cost. Requests are accepted at the Readers' Services Desk.

## **Database Searching**

On-line access to more than 300 information databases through DIALOG and VU/TEXT is available through skilled faculty librarians. The databases cover most fields and are particularly thorough in the areas of business and the sciences and for bibliographic citations of journal articles.

Students will find that on-line searches will be helpful in locating materials for research projects. Charges for this service are usually nominal. Requests should be made at the Readers' Services desk.

## **Other Services**

Coin-operated photocopiers and microform reader/printers, phonodisc turntables, circulating microfiche readers, and facilities for duplicating microfiche are available.



## **Athletics and Recreation Areas**

**Redman Stadium**, used for football and track events is located on the upper campus and was completed in 1974. A permanent concrete stand on the west side provides seating for 4,000 spectators, and bleachers on the east side increase the total seating capacity to nearly 5,000. There is a press box for media personnel.

Robert B. Redman, for whom the stadium was named, was assistant dean of men and head football and baseball coach from 1947 to 1952. Teams he coached gained state and national recognition.

**Litwhiler Field**, a baseball field completed in 1974, is located east of Redman Stadium. It was named in honor of Danny Litwhiler, former head baseball coach at Michigan State University. Litwhiler, who was coached by Dr. E. H. Nelson, studied at Bloomsburg in the late 1930s and played for several major league baseball teams prior to beginning his career as a baseball coach at Florida State University.

**Practice Fields and Recreational Facilities**—Nine practice fields are included in the total athletic complex on the upper campus. Fields for soccer, field hockey, lacrosse, and intramurals are available.

**Both Nelson Fieldhouse** on the upper campus and **Centennial Gymnasium** on the lower campus are used extensively for recreational activities as well as for classes and varsity athletic events.

Lower campus athletic and recreational facilities include 18 Grasstex tennis courts, nine of which are lighted; softball and field hockey/lacrosse fields; and outdoor basketball and volleyball courts.

## **The University Foundation**

The Bloomsburg University Foundation, Inc., was established in 1970 as a nonprofit educational corporation to assist the institution. The foundation, which was reactivated by President Ausprich in January 1986, has the responsibility of securing private funds to maintain and enhance quality and excellence in all areas of the university. The Bloomsburg University Foundation conducts an active program of information, cultivation, and solicitation among alumni, corporations, foundations, and private individuals. The foundation membership includes outstanding business, professional, and civic leaders from throughout the Commonwealth.

## **Learning Resources Center**

The Learning Resources Center is an umbrella group of services to faculty and students providing access to a 3,000-piece film collection, graphic production facilities, darkroom areas, sound recording facilities, and preview rooms. Instructional transparencies, filmstrips, audio recordings, motion picture films, and videotapes are made available through the center. The Autotutorial Laboratory is used for independent study in Room I231, McCormick Human Services Center and is made available through the Learning Resources Center.

## **Institute for Interactive Technologies**

The Institute for Interactive Technologies (IIT) provides research, education, training, and entrepreneurial assistance to solve training and operational problems that occur in education and industry through the application of various interactive technologies. The IIT designs, develops, and produces interactive technology based applications that include computer-based interactive videodisc, artificial intelligence, and expert systems and computer-aided design systems. The IIT also provides workshops for interactive video training and provides educational opportunities for students in the master's program in instructional technology.

## **Television and Radio Services**

The Television and Radio Services Department operates the university television and radio facilities in the McCormick Human Services Center and provides a range of services including preparation and production of videotape courseware for instructional support. It is a resource center for video teleconferencing programs and information, and it provides on-location or in-studio taping of lectures, presentations, and other academic activities as well as off-air recording of broadcast or satellite programs for classroom use.

## **Academic Computing Facilities**

Academic computing facilities are located throughout campus. The main clusters of general access computer labs and work areas are in Benjamin Franklin Hall and McCormick Human Services Center. Computers also are in classrooms and labs in Sutliff Hall and Bakeless Center for the Humanities. Specialized labs and small clusters are located in Hartline Science Center and Navy Hall.

The student lab in Room 1148 of McCormick has an AT&T 3B15 minicomputer with 35 AT&T 6300 PCs directly connected to it. An AT&T 3B2 also is located in the room and is connected to the 3B15. Room 1146 houses PCs and a cluster of Apple IIe computers.

The Benjamin Franklin student lab areas are in Rooms 1, 2, and 3. Room 1 is configured with PCs that can operate as terminals to the Sperry 1100 computer located nearby. Room 2 has a cluster of Macintosh computers that are networked to a laser printer. Room 3 has a cluster of Zenith and IBM computers. These microcomputers are attached to printers and are

used by students for programming, word processing, and other related course work. Macintosh, PC, and Apple IIGS computers in the computer classrooms of Bakeless and McCormick are also available for general access during periods of the day, evening, and weekends.

Students are permitted to connect their personal micros or terminals to either the 3B15 or the Sperry 1100 to do work from their rooms, home, or residence. Such units are linked by means of a modem and a phone line.

The work areas are supported by student consultants who are available to help students with basic problems in using the equipment and software in the lab areas. Students also work as programmers, operators, and aides helping to support academic and administrative computing at the university.

During the fall and spring semesters, access to the general access work areas is normally 7:30 a.m. to midnight, Monday through Thursday; 7:30 a.m. to 10 p.m. Friday; Saturday noon to 5 p.m.; Sunday, noon to midnight.

The AT&T 3B15 is a multi-user system. It has 35 terminal connections and 15 modems for dial-in access. Languages on the system include C, FORTRAN, COBOL, and Lisp. The Ingres database and Q-Office systems also are used for instructional purposes.

The Sperry system is the university's administrative computer but is used by students and faculty for instruction and research. The system is accessed by 30 terminal connections and 16 modems for dial-in access by students and faculty. Statistical programs, SPSS and BMD/BMDP, and FORTRAN are available on this system.

## **Administrative Computer Services**

The Computer Services facilities are located in Benjamin Franklin Hall. The Computer Center serves the university for administrative computing, but also provides selected services for student course work.

During the fall and spring semesters, access hours to the student labs are normally 8 a.m. to 12 p.m., Monday through Friday; Saturday, noon to 5 p.m.; and Sunday, noon to midnight.

The Unisys 1100 system is confirmed as follows: Central processor-1100/71, 12,000,000 bytes of main memory; disk storage-3 billion bytes of on-line mass storage on 7 drives; tapes-3 units with dual density capabilities for off-line storage on magnetic tapes; and distributed communication processor-89 access ports supporting 180 university owned terminals. The system operates under the OS-1100 operating system and supports all normal tape, disk, and telecommunication functions.

Terminal direct attachment to the mainframe is provided in Room 1, Benjamin Franklin Hall. Students can access the mainframe through a modem at 300/1200/ or 2400 baud. Call 389-4104 for details.

The following programming languages are available on Unisys: Assembler, COBOL, FORTRAN, and a CODASYL compatible data base. In addition, numerous special purpose languages and packages are available, including statistical and math programs such as SPSS, BMD, BMDP, and MATH Pak.

# ***COLLEGE OF ARTS AND SCIENCES***

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*John S. Baird Jr., dean,  
College of Arts and Sciences*



# COLLEGE OF ARTS AND SCIENCES

The College of Arts and Sciences includes curricula in 18 departments with the expressed intention of providing a quality liberal arts education. These curricula encourage broad exposure to knowledge, ideas, and intellectual process. The liberal arts philosophy places higher emphasis on general skills such as reading, writing, and critical analysis than on specific preparation for a particular career. Degree programs lead to a Bachelor of Science or a Bachelor of Arts, or both.

Bloomsburg was first authorized to offer the Bachelor of Arts in 1960 and the Bachelor of Science in 1963. Today, the college comprises 36 percent of the students and 64 percent of the faculty at Bloomsburg University. Virtually all general education courses—courses required of all students seeking a baccalaureate degree—are offered through Arts and Sciences.

The Bachelor of Arts offers the student the opportunity for a liberal education through study in the humanities, the social sciences, and the natural sciences and mathematics. There are two patterns for the Bachelor of Arts, a pattern of emphasis within a broad field and the more common major in one of the academic disciplines. The Bachelor of Science provides the opportunity for a liberal education together with a specialization in a number of fields. Liberal arts graduates are prepared for a wide range of future goals. Students who are undeclared or undecided about an academic major are encouraged to enroll in Arts and Sciences curricula.

## Degree Programs

All students must complete the general education requirements described in the section titled **General Education Requirements**. Each student selects a major and fulfills the major requirements as stated at the beginning of the course descriptions for each of the 18 disciplines. Several programs have more than one option for fulfilling the major requirements. The options within each degree program are indicated in the following list by bullets.

DEPARTMENT	DEGREE	PROGRAM
Anthropology	B.A.	Anthropology
Art	B.A.	Art Studio
Art	B.A.	Art History
Biological and Allied Health Sciences	B.A., B.S.	Biology • Microbiology • Marine Biology
Communication Studies	B.A.	Speech Communication
Communication Studies	B.A.	Theater Arts
Chemistry	B.A., B.S.	Chemistry
Chemistry	B.S.	Clinical Chemistry
Economics	B.A., B.S.	Economics
Economics	B.A.	Economics, Political

English	B.A.	English
Geography and Earth Science	B.S.	Earth Science
Geography and Earth Science	B.A.	Geography • Urban and Regional Planning • Environmental Planning
Geography and Earth Science	B.S.	Geology
Health, Physical Education, and Athletics	B.S.	Adult Health and Fitness
History	B.A.	History
Languages and Cultures	B.A.	French
Languages and Cultures	B.A.	Spanish
Mass Communications	B.A.	Mass Communications
Mathematics and Computer Science	B.S.	Computer Science
Mathematics and Computer Science	B.A., B.S.	Mathematics
Music	B.A.	Music • Music History • Applied Music
Philosophy	B.A.	Philosophy
Physics	B.A., B.S.	Physics
Physics	B.A., B.S.	* Liberal Arts and Engineering
Political Science	B.A.	Political Science
Psychology	B.A.	Psychology
Sociology and Social Welfare	B.A.	Sociology • Criminal Justice
Sociology and Social Welfare	B.A.	Social Welfare

\* Cooperative program with Pennsylvania State University and Wilkes College.

• An option or area of specialization within a degree program

## Honors Program

The College of Arts and Sciences provides superior students an opportunity to participate in an honors program during their junior and senior years. A student selected for this program participates in an honors seminar in the humanities, natural sciences and mathematics, or the social sciences and completes an honors thesis under the direction of a faculty member in the department sponsoring the honors student. Students interested in this program should speak with their faculty advisers during their sophomore year. Eligibility is limited to those with at least a 3.25 QPA for their first two years. The Honors Program is administered by a faculty committee within the College of Arts and Sciences.

Note: Courses listed in this catalog as experimental may only be offered by academic departments twice, and not necessarily in consecutive semesters.

## Academic Minors

In addition to achieving an in-depth understanding of an academic discipline by completing the requirements of a major, students may gain knowledge in a second area by completing the minor requirements of that discipline. Each academic minor consists of a minimum of 18 credit hours of courses. The following programs offer academic minors: anthropology, art studio, art history, biology, computer science, economics, English, French, geography, history, mathematics, music, philosophy, physics, political science, psychology, sociology, and Spanish. Students should contact the department for the requirements for academic minors.

## Preprofessional and Career Advisement

Preprofessional and Career Advisement Committees offer special supplementary advisement to students. Members of these committees help students learn about admission requirements of professional schools or careers and select college courses in harmony with these requirements.

Students interested in preprofessional or career advising should indicate this interest on their application for admission to the university in order that appropriate advisers may be notified of these interests.

### Pre-Medicine, Pre-Dentistry, Pre-Veterinary Medicine, Pre-Optometry, Pre-Pharmacy, Pre-Podiatry

As a rule, professional schools in these areas do not specify an undergraduate major, but they do specify minimum essential courses, especially in the sciences and mathematics. These minimum requirements usually include courses in general chemistry, organic chemistry, mathematics, biology, and physics. High standards of undergraduate scholarship are demanded for consideration. More than 85 percent of Bloomsburg University students who apply to medical and dental school are accepted. Students preparing for one or more of these careers should contact the Biological and Allied Health Sciences Department which provides faculty coordinators for preprofessional advisement.

## Pre-Law

Students who wish to prepare to study law should learn about the entrance requirements of law schools they are considering. A Pre-Law Advisory Committee makes a continuing study of such schools; its members will advise students in the choice of courses. Most law schools will consider applications from students with widely varying majors, placing emphasis on a thoroughly cultivated mind rather than any specific body of knowledge. Students interested in a law career or pre-law advisement should contact Professor Martin

Gildea of the Political Science Department or Professor Bruce Rockwood in the Department of Finance and Business Law.

## Career Concentrations

The College of Arts and Sciences provides multi-disciplinary opportunities for students to obtain a specialization in one of several career-oriented programs. By taking a series of courses, usually in process and content areas, the student gains a foundation knowledge for later placement in vocational settings. The career concentration is intended as a specialty area in addition to the liberal arts major. Career concentrations are not regarded as substitutes for an academic major, though course overlap exists for many programs.

Career concentrations exist in nine specific areas. Students interested in these programs should contact the faculty member listed below or review additional literature in the dean's office, College of Arts and Sciences.

Career Concentrations	Contact Person
Audiology Recording Techniques	Steve Wallace (Music)
Community Recreation Leader	William Sproule (HPEA)
Community Services	Charles Laudermilch (Sociology and Social Welfare)
Environmental Planning	Brian Johnson (Geography and Earth Science)
Family, Children, and Youth	Dale Sultzbaugh (Sociology and Social Welfare)
Gerontology	Chang Shub Roh (Sociology and Social Welfare)
Organizational Relations	Jim Huber (Sociology and Social Welfare)
Outdoor Leadership and Management	Jim Dalton (Psychology)
Public Administration	Charles Jackson (Political Science)

## Independent Study

Independent study provides an opportunity for the student to pursue in-depth individualized instruction in a topic of special value or interest to the student. A limited number of independent study offerings are available each semester. Students interested in applying for independent study should develop a written proposal with their faculty sponsor. The number of semester hours credit should be specified in the proposal. Independent study proposals, along with the name of the faculty sponsor, should be submitted to departments for recommendation, then to the dean of Arts and Sciences for final approval.

# **ANTHROPOLOGY**

## **Faculty**

Professor David Minderhout; Associate Professor Robert Reeder; Assistant Professor Thomas Aletto

### **B.A. in Anthropology**

A major constitutes 36 credits in this subject area.

**Required Courses:** 46.200, 210, 220, 470; either 45.260, 48.160, or 53.141; either 46.301, 466, 475, or 497.

**Elective Courses:** Choose two courses from each of the three subdisciplines: Archaeology, 46.300, 301, 310, 340, 380, 480; Cultural Anthropology 46.320, 390, 440, 450, 480; Physical Anthropology 46.260, 350, 405, or other courses as recommended by the adviser; students contemplating graduate school should consider taking Mathematics 53.171.

### **Minor in Anthropology**

A minor constitutes 18 credits in this subject area.

**Required Courses:** 46.200, 210, 220

**Elective Courses:** Choose three courses from one of the three subdisciplines: Archaeology 46.300, 301, 310, 340, 380; Cultural Anthropology 46.300, 350, 390, 440, 480; Physical Anthropology 46.300 and 405 are required; one course may be chosen from 46.350, 50.102, 233, 454, and 51.102.

### **COURSE DESCRIPTIONS**

#### **Anthropology (Code 46)**

##### **46.101 INTRODUCTION TO ANTHROPOLOGY**

**3 semester hours**

A beginning course for students with no background in anthropology. Provides an overview of peoples and cultures of the world today and of the past as well as the fossil evidence for human evolution. Special topics may include living primates, magic and religion, and kinship, marriage, and sex roles.

##### **46.102 ANTHROPOLOGY AND WORLD PROBLEMS**

**3 semester hours**

Students will explore the origins of global problems and evaluate the variety of cultural solutions to those problems. Cultural values and solutions of tribal peoples will be investigated holistically and compared to those of industrialized nations in terms of their consequences and implications.

##### **46.200 PRINCIPLES OF CULTURAL ANTHROPOLOGY**

**3 semester hours**

Examines a cross-cultural study of all human behaviors in contemporary cultures. Topics surveyed include socialization; language; sex, age, and kinship roles; marriage and the family; religion and magic; political and economic behavior; the arts; and cultural change. Anthropological methodology and the concept of culture also are stressed.

##### **46.210 PREHISTORIC ARCHAEOLOGY**

**3 semester hours**

Provides a world-wide examination of human prehistory from the origins of agriculture to the development of early writing. Focuses on regional differences and similarities in key evolutionary transitions including sedentary lifeways, urban origins, and the rise of states.

##### **46.220 PRINCIPLES OF PHYSICAL ANTHROPOLOGY**

**3 semester hours**

Studies the emergence and development of man, the biological basis of human culture and society, and the origin of the social units of fossil humans.

##### **46.260 MEN AND WOMEN:**

##### **AN ANTHROPOLOGICAL PERSPECTIVE**

**3 semester hours**

A cross-cultural and evolutionary perspective on sex role behavior in past and contemporary cultures. Sex roles will be examined in nonhuman primates as well as in humans. Sex roles in hunting and gathering, horticultural, pastoralist, peasant, and other preindustrial societies will be described as well as sex roles in modern industrial societies. Both genetic and environmental theories of sex role behavior will be discussed and evaluated.

Prerequisite: 3 credit hours of anthropology

##### **46.300 ARCHAEOLOGICAL METHOD AND THEORY**

**3 semester hours**

Describes the nature of archaeological remains and explains how archaeology can be used to answer key questions concerning long-term change in human economic, political, and social behavior. Illustrative examples are drawn from around the world; however, past inhabitants of northeastern United States are given the most intensive examination.

##### **46.301 FIELD ARCHAEOLOGY**

**3-6 semester hours**

Provides field investigation of various aboriginal cultures that have occupied the valley of the north branch of the Susquehanna River since the glacial age. Emphasizes excavation of sites in this area, preceded by orientation to stratigraphic and recording techniques.

##### **46.310 AZTECS AND MAYANS**

**3 semester hours**

Surveys the prehistoric cultures of Mexico and Central America. Special emphasis on the development of Aztec and Mayan civilizations.

##### **46.311 ARCHAEOLOGY OF NORTHEASTERN NORTH AMERICA**

**3 semester hours**

Surveys the prehistoric cultures of the area from arrival of the first inhabitants through early historic times. Course provides a laboratory for study of broader issues of socio-cultural processes.

**46.320 CONTEMPORARY WORLD CULTURES**  
**3 semester hours**

Presents comparative analysis of selected non-European societies in contrasting cultural and natural areas. Indicates stresses on the natural and social environment; national character; religion and world view; and literary, artistic, and musical expression.

(Offered summers only.)

**46.340 NORTH AMERICAN INDIANS**  
**3 semester hours**

Surveys of the native cultures of North America in prehistoric and early historic periods. Includes Indians and archaeology of Pennsylvania.

**46.350 MEDICAL ANTHROPOLOGY**  
**3 semester hours**

Studies of cross-cultural concepts of health, illness, and curing as well as health care delivery in industrialized cultures. Includes the topics of divination and diagnosis, sorcery and witchcraft in healing, public health and preventive medicine, alcoholism and drug use, and the medical knowledge of tribal and peasant societies.

**46.380 CULTURE CHANGE AND CULTURE CONTACT**

**3 semester hours**

Examines the modern world with emphasis on emerging new patterns of Western and international culture. Studies the impact of mass society and technology on the environment and humans, and prospects for the future.

Prerequisite: 46.200 or 46.210

**46.390 SOCIALIZATION OF THE CHILD**  
**3 semester hours**

Life experience and adjustment of the individual through infancy, middle childhood, and youth. Reviews contrasting methods of introducing children to adult economic, social, and religious activities.

Prerequisite: 46.200

**46.405 PRIMATES**  
**3 semester hours**

Studies the various phenomena affecting primate behavior; ecology, social life, and socio-cultural adaption, with emphasis on the development of socio-biological traits relating to human origins.

Prerequisite: either 46.220, 50.210, or 102

**46.440 LANGUAGE AND CULTURE**  
**3 semester hours**

Studies the place of oral and non-oral language in human evolution and contemporary cultures. Discusses dialectal variation, discourse analysis, multi-lingualism, language and cognition, and the role of language in education.

**46.450 PEOPLES AND CULTURES OF SOUTH AMERICA**

**3 semester hours**

Presents a survey introduction to the aboriginal, non-literature cultures of South America including the ecological background, archaeology, and cultural patterns.

**46.466 INDEPENDENT STUDY IN ANTHROPOLOGY**

**3 semester hours**

Independent study by a student with faculty guidance of a particular research problem in anthropology. The research problem will either extend current course content or deal with an area not covered in the current course offerings in anthropology. The problem will be chosen by the faculty member and the student working together. (See section on Professional and Career Advisement.)

**46.470 HISTORY AND ANTHROPOLOGICAL THOUGHT AND THEORY**

**3 semester hours**

Surveys intensively the leading methods and theories of anthropological and ethnological interpretation with special emphasis on the concept of culture and its practical application to modern problems.

**46.475 FIELD METHODS IN CULTURAL ANTHROPOLOGY**

**3 semester hours**

Provides class discussion and field experience in participatory observation. Students will be given experience in informant interviewing, census taking, kinship charting, mapping, studying complex organizations, and writing ethnographic field reports.

**46.480 RELIGION AND MAGIC**

**3 semester hours**

A comparative analysis of the origins, elements, forms, and symbolism of religious beliefs and behavior; the role of religion in society with particular reference to nonliterate societies. Anthropological theories and methods of religion, both historical and contemporary.

**46.495 SPECIAL TOPICS IN ANTHROPOLOGY**

**3 semester hours**

Provides for instruction and student research within selected areas of interest not available in other courses.

Prerequisite: 18 credit hours of anthropology or consent of the instructor

**46.497 INTERNSHIP IN ANTHROPOLOGY**

**3-15 semester hours**

An on-site training and learning experience in anthropology designed to give the student opportunities to apply theoretical and descriptive knowledge of archaeology, cultural anthropology, and physical anthropology in private and government institutional settings.

# ART

## Faculty

Professor Stewart L. Nagel (chairperson); Associate Professors Robert B. Koslosky, Kenneth T. Wilson, Barbara J. Strohman, Karl A. Beamer; Assistant Professors Carol Burns, Gary F. Clark, Christine M. Sperling, Vera Viditz-Ward, Charles T. Walters; adjunct faculty Chester P. Snyder

## B.A. in Art

**Art History** — A minimum of 39 credits is required for a major in art history.

**Required Courses:** 24 credits must be in the area of art history with an additional 6 credits in art studio courses or 32.490, 495, 480; and an additional 3 credits from either art education (Code 30), art history (Code 31), or art studio (Code 32). There is a foreign language requirement of 6 credits in French, German, Italian, or other languages approved by the chairperson.

**Art Studio** — A minimum of 39 credits is required for a major in art studio.

**Required Courses:** Design, 6 credits; drawing, 6 credits; painting, 3 credits; sculpture, 3 credits; art history (Code 31), 6 credits. Plus 9 credits in one of the following: ceramics, fabric design, graphics, painting, photography, sculpture, weaving, or 6 credits in drawing. Plus art elective, 6-9 credits.

## Minor in Art History

A minor in art history requires 15 credit hours in art history courses plus Introduction to Art for a total of 18 credits. An art studio course is also recommended.

## Minor in Art Studio

The minor in art studio requires 15 credit hours in art studio courses, including three levels of a studio specialization and Introduction to Art for a total of 18 credits. An art history course is also recommended.

## COURSE DESCRIPTIONS

### General - Art Education (Code 30)

#### 30.101 INTRODUCTION TO ART

3 semester hours

Reviews great works of art, past and present, with an emphasis of the structure of art as determined by civilization, communication, and expression.

#### 30.205 CHILDREN'S ART

3 semester hours

Provides encounters with the art of children and ways to promote attitudes of discovery and invention, with emphasis on growth of expression.

#### 30.303 CRAFTS IN SPECIAL EDUCATION

3 semester hours

Presents a workshop course designed to involve students in a variety of craft experiences for many different types of special learners.

#### 30.306 VISUAL ARTS FOR THE EXCEPTIONAL CHILD

3 semester hours

Stresses the importance of art activity, theory, and practice as a means of enriching and stimulating special children's awareness of themselves and their work. Emphasizes those positive aspects for creative activity that the handicapped child possesses.

Recommended for special education and psychology majors with junior standing.

#### 30.350 ART EDUCATION IN THE ELEMENTARY SCHOOL

3 semester hours

Reviews theories and techniques basic to the use of art in the elementary school.

#### 30.385 PHILOSOPHY AND PSYCHOLOGY OF ART

3 semester hours

Studies major philosophical points of view governing an understanding and criticism of the arts, past and present, together with 20th century readings in the psychology of art and content and biology of artistic form.

### Art History (Code 31)

#### 31.215 AMERICAN ART HISTORY

3 semester hours

Studies the history of visual arts in America.

#### 31.225 HISTORY OF ARCHITECTURE

3 semester hours

Presents a study-survey of great architectural works of the past and present including examples of both East and West.

#### 31.235 ANCIENT AND MEDIEVAL ART

3 semester hours

Studies the history of the visual arts on the European continent from the prehistoric era up to and including the Late Gothic.

#### 31.236 ART FROM THE RENAISSANCE THROUGH IMPRESSIONISM

3 semester hours

Studies the history of the visual arts beginning with the Italian Renaissance up to and including French painting of the 19th century.

#### 31.345 ART HISTORY OF THE NEAR EAST

3 semester hours

Studies the history of the visual arts of the Islamic and the Mesopotamian worlds.

**31.346 ART HISTORY OF THE FAR EAST**  
**3 semester hours**

Studies the history of the visual arts of India, China, Japan, and Southeast Asia.

**31.355 HISTORY OF MODERN ART**  
**3 semester hours**

Examines movements in art from mid-19th century France to the contemporary United States.

**31.375 INDEPENDENT STUDY IN ART HISTORY**  
**3 semester hours**

Entails research and scholarship on a selected, approved topic in art history under the supervision of a faculty member, resulting in a publishable paper. (See section on Professional and Career Advisement.)

**31.395 VISUAL AESTHETICS**  
**3 semester hours**

A seminar emphasizing artistic concern with environmental relationships and theories of aesthetics and art criticism.

**31.415 PRIMITIVE ARTS**  
**3 semester hours**

Surveys graphic arts, literature, music, and the dance of ancient and non-European cultures with slides, films, specimens, and recordings. Course also is listed as Anthropology 46.410. Offered in cooperation with the Department of Anthropology.

**Art Studio  
(Code 32)**

*Level I courses are open to all students.*

**32.111 DRAWING I**  
**3 semester hours**

Examines various approaches toward drawing and explores the use of a variety of drawing materials. Studio practice and class critiques will address each person's power of observation, craftsmanship, self-expression, and growth.

**32.151 THREE-DIMENSIONAL DESIGN**  
**3 semester hours**

An introduction to the basic elements and principles of design such as the organization of visual elements and color, with an emphasis on three-dimensional design.

**32.152 TWO-DIMENSIONAL DESIGN**  
**3 semester hours**

An introduction to the basic elements and principles of design such as the organization of visual elements and color, with an emphasis on two-dimensional design.

**32.195 COMPUTER ART GRAPHICS**  
**3 semester hours**

An introductory course designed to explore the potential of the computer as a tool to create fine art. Images based on current computer technologies will be stressed. Use of software and computers to create new kinds of images will be a primary concern. An understanding of new technologies can

be an important tool for an artist to become sensitive to his or her culture. Also, by using technologies with a fine arts approach, students will make significant discoveries for development into their own creative work.

**32.201 CERAMICS I**  
**3 semester hours**

Introduces the processes of making and firing ceramic objects.

**32.202 CERAMICS II**  
**3 semester hours**

Affords students the opportunity to become more involved by selecting their own methods of work.

Prerequisite: 32.201

**32.212 DRAWING II**  
**3 semester hours**

Continued exploration of attitudes and materials stressing composition and form. Work from the human skeleton and linear perspective will be included.

Prerequisite: 32.111

**32.221 FABRIC DESIGN I**  
**3 semester hours**

Introduction to a variety of methods, approaches, tools, materials, and visual concepts in designing with fibers.

(Offered fall semester only.)

**32.222 FABRIC DESIGN II**  
**3 semester hours**

Presents a continuation of Fabric Design I with limited areas of concentration selected by each student. Professional methods, approaches, and attitudes discussed.

Prerequisite: 32.221

(Offered fall semester only.)

**32.231 PAINTING I**  
**3 semester hours**

Introduction to the methods, materials, and concepts of painting. Provides exploration of and increased sensitivity to one's environment through color.

**32.232 PAINTING II**  
**3 semester hours**

Devotes attention to the development of the technical skill inherent in the formation of images. Includes the study of the landscape as a concept in painting.

Prerequisite: 32.231

**32.241 SCULPTURE I**  
**3 semester hours**

Explores three-dimensional artistic expression with an emphasis on introducing a student to basic sculptural materials.

**32.242 SCULPTURE II**  
**3 semester hours**

Promotes continued development in the use of materials and processes; strives for unique individual expression.

Prerequisite: 32.241

**32.251 WEAVING I****3 semester hours**

Provides an introduction to weaving including foot-powered looms and off-loom techniques. Weaves, fibers, spinning, and looms will be part of the studio experience.

Prerequisite: 32.152 or consent of the instructor  
(Offered spring semester only.)

**32.252 WEAVING II****3 semester hours**

The loom-controlled sampler will be required plus continued experience in weaving techniques and artistic decision dealing with fibers.

Prerequisite: 32.251

**32.261 GRAPHICS I: PRINTMAKING****3 semester hours**

Introduction to the methods, materials, and concepts of graphic art through exploration of basic printmaking techniques.

**32.262 GRAPHICS II: PRINTMAKING****3 semester hours**

Emphasis on color printmaking and color registration procedures. Provides a concentration in serigraphy and intaglio techniques.

Prerequisite: 32.261

**32.273 DESIGN III****3 semester hours**

Advanced design problems will be undertaken stressing individualized productions, involvement, and individual expression through design.

Prerequisite: 32.272

**32.275 CRAFTS I****3 semester hours**

Introduction to a varied array of crafts, methods, tools, materials, techniques, and artistic concepts.

**32.276 CRAFTS II****3 semester hours**

Provides a continued exploration of selected in-depth crafts processes and concepts on a more professional basis.

Prerequisite: 32.275

**32.281 PHOTOGRAPHY I****3 semester hours**

Introduction to black and white photography as a medium of visual expression. Technical emphasis on fundamental camera and exposure controls and introduction to darkroom printing techniques. Photographic composition, style, and theory discussed. Students must have a 35mm camera and provide their own film and paper.

**32.282 PHOTOGRAPHY II****3 semester hours**

Continued exploration of black and white fine art photography. Emphasis on refining exposure and printing skills. Introduction to zone system metering, medium format photography, and alternative photographic processes. Student must

have a camera and provide their own film and paper.

Prerequisite: 32.281

**32.303 CERAMICS III****3 semester hours**

Provides the student an opportunity to specialize through the pursuit of making an art object.

Prerequisite: 32.202

**32.304 CERAMICS IV****3 semester hours**

Requires students to be responsible for making, firing, and showing their own wares.

Prerequisite: 32.303

**32.313 DRAWING III****3 semester hours**

Entails studio practice, outside assignments, and critiques in pursuit of self-discovery and personal expression. Each student completes an individual project.

Prerequisite: 32.212

**32.314 DRAWING IV****3 semester hours**

Continued studio practice, outside assignments, and critiques stress individuality and deep involvement of personal expression. An individual project is pursued by each student.

Prerequisite: 32.313

**32.323 FABRIC DESIGN III****3 semester hours**

Provides a continuation of Fabric Design II with concentration in one area selected by the student. Focus is on refining one's craft, visual perception, and professional attitude.

Prerequisite: 32.222

(Offered fall semester only.)

**32.324 FABRIC DESIGN IV****3 semester hours**

Presents a continuation of Fabric Design III with each student functioning in one area in a highly independent and professional manner.

Prerequisite: 32.323

(Offered fall semester only.)

**32.333 PAINTING III****3 semester hours**

Provides development toward maturity of study and statement. Includes study of the figure as a concept in painting.

Prerequisite: 32.232

**32.334 PAINTING IV****3 semester hours**

Provides advanced work planned for individual needs. Paintings are structured from experiences based upon previous development.

Prerequisite: 32.333

**32.343 SCULPTURE III****3 semester hours**

Focuses on the expansion of expression and its relationship to sculptural processes.

Prerequisite: 32.242

**32.344 SCULPTURE IV****3 semester hours**

Enables advanced, independent work toward a maturing, personal expression in sculpture.

Prerequisite: 32.343

**32.353 WEAVING III****3 semester hours**

Provides continued experience in weaving techniques with emphasis on in-depth production, two-dimensional or three-dimensional.

Prerequisite: 32.252

(Offered spring semester only.)

**32.354 WEAVING IV****3 semester hours**

Develops an individualistic approach to weaving with emphasis on in-depth production.

Prerequisite: 32.353

(Offered spring semester only.)

**32.363 GRAPHICS III: PRINTMAKING****3 semester hours**

Exploration of mixed media printmaking methods and concepts. Photographic and lithographic techniques are emphasized.

Prerequisite: 32.262

**32.364 GRAPHICS IV: PRINTMAKING****3 semester hours**

Exploration of experimental printmaking. Emphasis on personal expression.

Prerequisite: 32.263

**32.380 JEWELRY MAKING****3 semester hours**

Studies jewelry forms, past and present, from the standpoint of both utility and design. Problems in wood and metals, ceramics, glass, and plastics, exploring contemporary jewelry forms and processes.

**32.383 PHOTOGRAPHY III****3 semester hours**

Students develop personal photographic projects to produce during the semester. Emphasis on individual exploration of black and white photographic materials and processes. Students must have their own 35mm camera, film, and paper.

Prerequisite: 32.282

**32.384 PHOTOGRAPHY IV****3 semester hours**

Students produce personal photographic projects resulting in final portfolios and exhibition of fine art photographic prints. Students must provide 35mm camera, film, and paper.

Prerequisite: 32.383

**32.395 ART AND CULTURE OF FRANCE****3 semester hours**

Provides a study-tour of France with specific attention to French art seen in relation to its social and cultural environment. Course features a different theme each time it is offered. Visits planned to areas relating to theme. Past themes include "The Age of Francis I," "The Art of Provence," and "The Normandy Influence."

**32.475 INDEPENDENT STUDY IN STUDIO ARTS I****1-3 semester hours**

Allows individualized independent study in a selected studio area. Amount of course credit awarded is determined by the instructor on the basis of the substance and depth of the project to be undertaken.

Prerequisite: Satisfactory completion of four levels of a studio area or its equivalent.

(See section on **Preprofessional and Career Advisement**.)

**32.476 INDEPENDENT STUDY IN STUDIO ARTS II****1-3 semester hours**

Extension of independent study in Studio Arts I.

**32.480 INTERNSHIP IN ART****3-6 semester hours**

Provides upper-level art majors with an opportunity to acquire meaningful experiences in practical work situations outside the regular courses prescribed by art curriculum (e.g., museum curator, designers, merchandising operations, artists).

**32.490 ART GALLERY****3 semester hours**

Provides involvement with the collection, preservation, and exhibition of art work. Experience concludes with planning and hanging an exhibition in Haas Gallery of Art. Visits to museums and art galleries will familiarize students with the varied nature and philosophy of exhibition today.

**32.495 INDEPENDENT STUDY IN ART MEDIA****3 semester hours**

Stresses individual projects in the plastic arts not covered by other studio course offerings and in-depth explorations, innovative uses, and applications of selected art media

(See section on **Preprofessional and Career Advisement**.)

# BIOLOGICAL and ALLIED HEALTH SCIENCES

## Faculty

Professors James E. Cole, Judith P. Downing, Phillip A. Farber, Michael Herbert, Frederick C. Hill, Louis V. Mingrone (chairperson); Associate Professors George J. Gellos, Mark S. Melnychuk (assistant chairperson), Lynne C. Miller, James E. Parsons, Robert G. Sagar, and Cynthia A. Surmacz, Assistant Professors Joseph Ardizzi, George Chamuris, Thomas S. Klinger, John R. Fletcher, Margaret L. Till.

### B.S. in Biology

**Required Courses:** Biology 50.110, 120, 332, 351, 380, 331, or 361 or 364 or 462; 50.371 or 372 or 472 and additional biology courses for a minimum of 30 credits; Chemistry 52.111 and 112, or 118, 113, 231, 232, and two additional chemistry courses (7 or 8 semester hours) to be selected from 52.221, 341, 361, 362, 251, 452, 433; Physics 54.111, 112, or 54.211, 212, or Mathematics (6 or more credit hours) 53.141 or 48.160 and 123; or 53.141 or 48.160 and 53.125, or 53.125, 126; Languages and Cultures—at least one semester of any foreign language at the 102 level or above.

Options within this degree program include microbiology and marine biology.

### B.A. in Biology

**Required Courses:** Biology 50.110, 120, 332, 351, 380, 371, or 372, or 472; and additional biology courses for a minimum of 30 credits; Chemistry 52.111 and 112 or 118 and 113, 230, and 341, or 52.231 and 232; Mathematics 9 semester hours to be selected from 53.123, 141, or 48.160 and 53.175; Languages and Cultures—at least one semester of a foreign language at the 102 level or above.

Options within this degree program include microbiology and marine biology.

### Microbiology Option

The option provides a biology major the opportunity to specialize in microbiology while obtaining a general background in biology. The option is also open to medical technology majors (See section on College of Professional Studies). The requirements for this option are the same for the B.S. program as for the B.A.

**Biology Core:** 50.110, 120, 332, 351, and 380, plus either 50.371 or 472

**Microbiology Core:** 50.242, 243, 342, and 343

**Electives:** Choose three courses (9 hours) 50.350, 432, 450, 455, 471, 482, or 483

### Marine Biology Option

This option provides the biology major with the opportunity to specialize in marine biology while obtaining a general background in biological sciences. The marine biology option

is made possible by the department's membership in the Marine Science Consortium, which maintains the Marine Science Center near Wallops Island, Va. (See Marine Science for a listing of courses offered through the Marine Science Center.) The requirements for this option vary with the degree program.

**B.S./Option Requirements:** Biology 50.110, 120, 332, 380, 371, 372, or 472; 55.241, 260, or 50.351; 55.221 or 50.211 and additional credits in biology for a minimum of 30 credits; at least 12 credits in biology must be marine science courses; chemistry, physics, mathematics, and languages and cultures requirements remain the same.

**B.A./Option Requirements:** Biology 50.110, 120, 332, 380; 50.371, 372 or 472; 55.241; 55.260 or 50.351; 55.221 or 50.211 and additional credits in biology for a minimum of 30 credits; at least 12 credits in biology must be marine science courses; chemistry, mathematics, and languages and cultures requirements remain the same.

### Allied Health

Curricula for medical technology, radiologic technology, dental hygiene, pre-physical therapy, pre-occupational therapy, pre-cytotechnology, and health services associate are listed under the College of Professional Studies.

### Cooperative Education

The department participates in cooperative education. Students may receive up to 15 credits in this program. Contact the departmental cooperative education coordinator for information on this program.

## COURSE DESCRIPTIONS

### Biological and Allied Health Sciences (Code 50)

#### COURSES FOR BIOLOGY MAJORS

##### 50.107 MEDICAL TERMINOLOGY

1 semester hour

Studies roots, prefixes, and suffixes of medical terms via programmed instruction. Required of health science biology majors. Recommended for other biology majors and students in the health sciences. Should be taken freshman year.

##### 50.110 BIOLOGY OF ANIMALS

4 semester hours

Introduces fundamental principles of zoology as applied to representative groups of animals. Laboratory work emphasizes comparative development, anatomy, physiology, and behavior of representative animals. Three hours lecture/3 hours laboratory per week.

##### 50.120 BIOLOGY OF PLANTS

4 semester hours

Introduces fundamental principles of taxonomy, anatomy, morphology, physiology, and genetics as applied to the plant kingdom. Three hours lecture/3 hours laboratory per week.

**50.211 INVERTEBRATE ZOOLOGY****3 semester hours**

Studies the principal phyla of invertebrate animals in relation to their anatomy, classification, and behaviors in the ecosystems in which they participate. Field trip component of course (at Marine Science Consortium, Wallops Island, Va.) includes additional student costs. Three hours lecture/2 hours laboratory per week.

Prerequisite: 50.110.

**50.212 VERTEBRATE ZOOLOGY****3 semester hours**

Studies the biology of vertebrate animals, emphasizing morphology, physiology, natural history, and behavior. Reviews evolutionary and ecological aspects of each class. Includes laboratory work with living and preserved specimens to familiarize students with representative individuals of the major classes of this group. Field trip component (at Marine Science Consortium, Wallops Island, Va.) includes additional student costs. Three hours lecture/3 hours laboratory per week.

Prerequisite: 50.110

(Offered fall semester only.)

**50.233 HUMAN GENETICS****3 semester hours**

Explores principles of human genetics and their application to problems in biology, medicine, psychology, special education, anthropology, and sociology. Three hours lecture per week.

Prerequisite: 50.101 or 110 or consent of the instructor.

**50.242 GENERAL MICROBIOLOGY****3 semester hours**

Introduces fundamental principles of nomenclature, classification, microscopy, cytology and anatomy, cultivation, growth, metabolism, and genetics of the microbial world. Microbial interrelationships and control will be integrated into a systematic approach to classical bacteriology as it relates to humans and the environment. Three hours lecture/discussion per week.

**50.243 GENERAL MICROBIOLOGY LABORATORY****2 semester hours**

Provides a laboratory experience to fortify students' didactic learning in general bacteriology (50.242). Emphasis on microscopy, cytology and anatomy of bacteria, culture methodology, growth, reproduction, enumeration, physiology, control by both physical and chemical agents, genetics, microbial interrelationships, quality control, and laboratory safety. Four hours per week.

Prerequisite: 50.242, or taken concurrently

**50.252 FIELD ZOOLOGY****3 semester hours**

Studies common vertebrates (excluding birds) of North America with emphasis on observation, collection, and recognition of local fauna. Two hours lecture/3 hours laboratory per week.

Prerequisite: 50.110 or consent of the instructor  
(Offered odd years, summers only.)**50.253 FRESHWATER BIOLOGY****3 semester hours**

Emphasizes the chemical, physical, and biological aspects of freshwater environments. Two hours lecture/3 hours laboratory per week.

Prerequisite: 50.110 and 120 or consent of the instructor  
(Offered summer only.)**50.263 FIELD BOTANY****3 semester hours**

Addresses identification and classification of seed plants represented in local flora. Two hours lecture/3 hours laboratory per week.

Prerequisite: 50.120 or consent of the instructor  
(Offered even years, summers only.)**50.271 CELL BIOLOGY****3 semester hours**

Examines the structure and function of the cell and its organelles. Emphasis is on general principles and processes by which all cells function. Three hours lecture/2 hours laboratory per week.

Prerequisites: 50.110 or 50.120, 52.111 or 52.118 and 52.113.

**50.321 COMPARATIVE BIOLOGY OF NONVASCULAR PLANTS****3 semester hours**

Provides a phylogenetic study of major nonvascular plants with emphasis on development, structure, reproduction, and selected ecological aspects. Two hours lecture/3 hours laboratory per week.

Prerequisite: 50.120

**50.322 COMPARATIVE BIOLOGY OF VASCULAR PLANTS****3 semester hours**

Provides a phylogenetic study of major vascular plants with emphasis on their development, structure, reproduction, and selected paleobotanical aspects. Two hours lecture/3 hours laboratory per week.

Prerequisite: 50.120

**50.331 EMBRYOLOGY****3 semester hours**

Reviews patterns, processes, and principles of animal development. Laboratory studies emphasize descriptive embryology of a number of representative vertebrates with emphasis on amphibian, bird, and mammal development. Two hours lecture/3 hours laboratory per week.

Prerequisite: 50.110 or consent of the instructor  
(Offered spring semester only.)**50.332 GENETICS****3 semester hours**

Addresses mechanisms of heredity in animals and plants; Mendelian inheritance, probability, linkage, crossing over,

chromosomal modifications, nucleic acids, and gene action. Three hours lecture/2 hours laboratory per week. Laboratory hours may vary.

Prerequisite: 50.110 or 120

#### **50.342 MEDICAL BACTERIOLOGY**

**3 semester hours**

Provides a study of bacteria capable of causing disease in humans. The emphasis will be on the laboratory aspects of bacterial disease but includes pathogenicity, identification, diagnosis, treatment, and prevention. Three hours lecture/2 hours laboratory per week.

Prerequisite: 50.242 and 243

#### **50.343 IMMUNOLOGY**

**3 semester hours**

Presented as a lecture course: responses to infectious agents, immunochemistry, immunobiology, clinical laboratory applications, and tissue transplantation. Three hours lecture/discussion per week.

Prerequisite: 50.342; background in organic chemistry is recommended

#### **50.350 PLANT PATHOLOGY**

**3 semester hours**

Course examines the nature of vascular plant diseases, the biology of plant pathogens, and the impact of diseases on human affairs. Lecture stresses principles of plant pathology: disease and pathogen classification, modes of pathogenesis, host response to disease, and disease control. Laboratory stresses identification of plant pathogens and disease symptoms, histology of diseased tissues, and research techniques. Three hours lecture/ 2 hours laboratory per week.

Prerequisite: 50.120; 50.242 recommended; or consent of the instructor

#### **50.351 GENERAL ECOLOGY**

**3 semester hours**

Introduces principles and concepts pertaining to energy flow, limiting factors, habitat studies, succession patterns, and population studies at the species, interspecies, and community level. The field trip component of this course may include additional student costs of approximately \$35 for food and lodging. Two hours lecture/3 hours laboratory per week.

Prerequisite: 50.110 or 120 or consent of the instructor

#### **50.361 COMPARATIVE VERTEBRATE ANATOMY**

**3 semester hours**

Presents a comparative study of the chordates emphasizing the vertebrate classes. Particular attention is given to structure, morphogenesis, functional adaptations, and evolutionary trends. Laboratory emphasis is placed on the lamprey, shark, and cat. Two hours lecture/3 hours laboratory per week.

Prerequisite: 50.110 or consent of the instructor

#### **50.364 VERTEBRATE HISTOLOGY**

**3 semester hours**

Studies the structure and function of vertebrate cells and tissues from various body systems. Laboratory studies include

the use of prepared slides and color photomicrographics. Two hours lecture/3 hours laboratory per week.

Prerequisite: 50.271 or consent of the instructor

#### **50.365 HISTOLOGICAL AND HISTOCHEMICAL TECHNIQUES**

**3 semester hours**

Provides theory and practice in the use of histological and histochemical techniques in a laboratory format. Fixation, preparation embedding, sectioning, and staining of various animal tissues. One hour lecture/4 hours laboratory per week.

Prerequisite: Recommended 50.364 or 52.211 or 231 or consent of the instructor

#### **50.371 PRINCIPLES OF MAMMALIAN PHYSIOLOGY**

**4 semester hours**

Principles of cell physiology that are basic to the function of the following mammalian tissue and systems are studied; blood, metabolic, neuromuscular, cardiovascular, and urinary. Neural and chemical processes of the aforementioned are emphasized. Three hours lecture/3 hours laboratory per week.

Prerequisite: 50.110 or 50.120 and 52.111, 112 and 113, or consent of the instructor. Background in organic chemistry, algebra, and at least sophomore standing is recommended.

#### **50.372 PLANT PHYSIOLOGY**

**3 semester hours**

An introduction to plant function including discussions of water relations, carbohydrate metabolism and translocation, photosynthesis, mineral nutrition, plant growth hormones, and growth and development. Three hours lecture per week.

Prerequisite: 50.120; 52.211 or 231 or consent of the instructor

(Offered spring semester only.)

#### **50.380 BIOLOGY SEMINAR**

**1 semester hour**

In order to communicate ideas of biology, students must learn to use current scientific literature as a data base. Course emphasizes preparation and presentation of biological topics in both oral and written formats.

Prerequisite: Junior standing or minimum of 64 semester hours completed

#### **50.390 INDEPENDENT STUDY IN BIOLOGY I**

**1-3 semester hours**

Acquaints students with techniques of scientific research, data collection, and analysis by engaging in a program of research with the aid of a faculty member. Research will culminate in a scholarly paper written by the student which presents the findings of the laboratory or field investigation in a form suitable for publication.

Prerequisite: Junior standing

#### **50.391 INDEPENDENT STUDY IN BIOLOGY II**

**1-3 semester hours**

Acquaints students with techniques of scientific research, data collection, and analysis by engaging in a program of scientific research with the aid of a faculty member.

**Prerequisite:** 50.390 and junior standing  
(See section on Preprofessional and Career Advisement.)

### **50.411 RADIATION BIOLOGY**

**3 semester hours**

Studies the effects of radiation on living organisms; nuclear structure; fundamental properties of radiation; physical, chemical, and genetic effect on plants and animals from cells to whole organisms; application of radiochemicals in biological studies.

**Prerequisite:** 52.232 or 233; 53.141 or 48.160 or consent of the instructor

### **50.431 EVOLUTION**

**3 semester hours**

Studies the major concerns of the theory of evolution and contributions toward their solutions made by genetics, paleontology, systematics, and ecology. Three hours lecture per week.

**Prerequisite:** 50.110 or 120; 50.332 recommended

### **50.432 MICROBIAL GENETICS**

**3 semester hours**

A genetic analysis of microbes to provide insights into the molecular basis of gene action using viruses, bacteria, and lower eukaryotes. Topics include DNA and genetic recombination, plasmids, transposons, and recombinant DNA. Three hours lecture/seminar a week.

**Prerequisite:** Consent of the instructor or two of the following courses-52.341 Biochemistry, 50.242 General Microbiology, 50.332 Genetics

### **50.441 CYTOGENETICS**

**3 semester hours**

The structures and behavior of chromosomes and their effects on development. Human genetic syndromes and the effects of chromosome abnormalities are described. Relationships between chromosomes, oncogenes, and cancer are explored. Laboratory studies include microscopic techniques, cell culture methods, and karyotype preparation. Two hours lecture/2 hours laboratory per week.

**Prerequisite:** 50.233 or 332 and 271; or consent of the instructor

### **50.450 MYCOLOGY**

**3 semester hours**

A critical survey of the kingdom Fungi, with emphasis on the Ascomycota, Basidiomycota, and Deuteromycota. Lectures cover the topics of morphology, physiology, biochemistry, cytology, genetics, systematics, ecology, and evolution. Laboratory stresses comparative morphology of higher fungi, laboratory techniques, and field mycology. Two hours lecture/3 hours laboratory per week.

**Prerequisites:** 50.120, one microbiology course, one genetics course, or consent of the instructor

### **50.454 ETHOLOGY**

**3 semester hours**

Presents a description and classification of animal behavior, its evolution, and biological function. Emphasizes

mechanisms underlying behavior, especially species typical behavior. Three hours lecture/ 2 hours laboratory per week.

**Prerequisite:** 50.110 and 371 or consent of the instructor

### **50.455 ENVIRONMENTAL MICROBIOLOGY**

**3 semester hours**

Provides a practical application of the knowledge of microorganisms, their effects on the environment, methods of control, sanitation, and related laboratory testing procedures. Field trips taken when practical. Four hours per week. Additional time may be required.

**Prerequisite:** A course in microbiology or consent of the instructor

### **50.457 ENTOMOLOGY**

**3 semester hours**

Studies the physiology, morphology, behavior, classification, and general biology of the insects. A collecting period will provide an opportunity for students to collect, mount, and properly display insects for study. Taxonomic emphasis limited to order and family. Equivalent to a minimum of five hours per week including laboratory.

**Prerequisite:** 50.110

(Offered even years, summers only.)

### **50.459 ORNITHOLOGY**

**3 semester hours**

Studies the biology of birds including bird identification in the field by song and sight. Studies birds of this region in relation to migration, time of arrival, and nesting. Two hours lecture/3 hours laboratory per week. Some study off-campus may be required. The field trip component of this course may include additional costs for food and lodging.

**Prerequisite:** 50.110 or consent of the instructor

### **50.462 PLANT ANATOMY**

**3 semester hours**

Outlines recent concepts of plant anatomy and historical consideration of classical researchers. Reviews structure, function, growth, and morphogenesis of the vascular plants. Addresses composition and growth of meristems and the phenomena of subsequent tissue differentiation. Describes anatomical organization by developmental and comparative methods in order to explain important cell, tissue, and organ relationships. Two hours lecture/3 hours laboratory per week.

**Prerequisite:** 50.120

### **50.463 BIOLOGICAL PHOTOGRAPHIC TECHNIQUES**

**3 semester hours**

Presents theory and practice of photography as applied to biology including negative and printmaking, gross specimen photography, copying, transparencies, film strips, autoradiography, nature work in close-ups, photomicrography, thesis illustration, and other special techniques. Two hours lecture and 3 hours laboratory per week. Additional laboratory hours may be required.

**50.471 MEDICAL PARASITOLOGY****3 semester hours**

Presents life history, physiology, taxonomy, and morphology of parasites of medical importance to mankind. Special attention given to clinical aspects such as pathology, symptomatology, diagnosis, prevention, and treatment. Laboratory work stresses identification of parasitic disease through living and preserved material, the proper handling of specimens, and methods of professional patient interviewing. Five hours per week.

Prerequisite: 50.110 and 52.112 or 231 or consent of the instructor. Completion of additional course work in biology and junior standing also suggested.

**50.472 CELL PHYSIOLOGY****3 semester hours**

Applies physical and chemical principles to cellular processes, biochemistry or cellular constituents, physiochemical environment, bioenergetics, and intermediate metabolism. Three hours lecture and discussion per week.

Prerequisite: 12 hours of biology and chemistry 52.211 or 231 or consent of the instructor

**50.473 SYSTEMATIC PHYSIOLOGY****3 semester hours**

Examines how normal body function is maintained by the precise control and integration of the specialized activities of the various organ systems. Three hours lecture/ 2 hours laboratory per week.

Prerequisite: 50.371 and 52.230 or 52.232 or consent of the instructor. Background in algebra recommended.

**50.481 ADVANCED SPECIAL TOPICS,  
BIOLOGY/ALLIED HEALTH SCIENCES****3 semester hours**

Presents an area of biology or allied health which requires the student to have some background in biology. Three hours of credit may be applied to a biology major.

Prerequisite: Determined by the instructor

**50.490 INTERNSHIP IN BIOLOGY AND  
BIOLOGY RESEARCH****3-15 semester hours**

A work-study program open only to juniors and seniors majoring in biology and allied health sciences. A maximum of 6 credits may apply toward requirements of biology and allied health sciences majors.

**50.493 HONORS INDEPENDENT STUDY-  
BIOLOGY RESEARCH****3 semester hours**

Open only to students admitted to the Honors Program. Consists of a field or laboratory investigation under the supervision of a biology faculty member.

Prerequisite: 50.390

**COURSE DESCRIPTIONS****Marine Science****(Code 55)**

Marine science courses are offered in the summer at the Marine Science Center near Wallops Island, Va. Courses in biology are offered by the Marine Science Consortium to satisfy requirements for the marine biology option and are acceptable as elective credit for biology majors. For further information, contact the adviser to the marine biology option.

For related marine science courses, see listing under Geography and Earth Science.

**55.221 MARINE INVERTEBRATES****3 semester hours**

A study of the life, history, habits, origin, development, physiology, anatomy, and taxonomy of the main phyla of invertebrates. A phylogenetic sequence is followed to show interrelationships among the phyla. Special emphasis is given to the Atlantic marine invertebrates. Laboratory and field work deal with collection, preservation, and identification of local species.

Prerequisite: One year of biology or consent of the instructor

**55.241 MARINE BIOLOGY****3 semester hours**

A study of plant and animal life in the marine environment. Emphasis will be placed upon physical and chemical environmental factors affecting the biota in the intertidal, open water, and benthic habitats. Common biota characteristics of each habitat will be investigated in terms of their natural history, morphology, and ecological relationships.

Prerequisite: Botany or zoology, or consent of the instructor

**55.250 WETLAND ECOLOGY****3 semester hours**

Structure and function of wetland ecosystems with special emphasis on coastal wetlands. Course considers the impact of humans on wetlands and ecological approach toward their management. Laboratory consists of field exercises in the study of wetlands.

Prerequisite: A course in ecology and upperclass standing

**55.260 MARINE ECOLOGY****3 semester hours**

Interrelationships among animals, plants, and physical and chemical aspects of the environment will be studied, with stress on adaptations for survival that are unique to the marine environment.

**55.298 PHYSIOLOGY OF MARINE  
INVERTEBRATES****3 semester hours**

Mechanisms and regulation of organ function in marine invertebrates with emphasis on homeostasis. Invertebrate examples of fundamental principles and unique mechanisms.

Prerequisite: Introductory biology

**55.300 BEHAVIOR OF MARINE ORGANISMS**  
**3 semester hours**

Concepts of ethology; discussion and observation of the influence of external and internal factors on the regulation; and control of behavior of organisms living in the marine coastal environment.

Prerequisite: General biology

**55.320 MARINE MICROBIOLOGY**  
**3 semester hours**

A survey of methods and concepts of marine microbiology. Focus on technical aspects of sample collection, microbial ecology of the marine environment, enrichment culturing, and methods of enumeration and identification with emphasis on marine bacteria.

Prerequisite: One year of biology

**55.330 TROPICAL INVERTEBRATES**  
**3 semester hours**

An introduction to tropical invertebrates, using a variety of collection and observation methods to sample nearshore and reef areas. Emphasis on systematics and ecology using the communities approach. One week at Wallops Island, Va., for intensive review of general systematics and ecology of marine invertebrates; then two weeks in Florida sampling and identifying species and describing ecological communities. Course is a sequel to marine invertebrates or a landlocked invertebrate zoology course or a thorough landlocked zoology course.

Prerequisite: Marine invertebrates, invertebrate zoology, or a thorough zoology course with consent of the instructor

**55.334 MARINE EMBRYOLOGY**  
**3 semester hours**

Principles of development and differentiation in marine organisms at the molecular and supramolecular levels of organization. Laboratory includes both descriptive and experimental embryology.

Prerequisite: Introductory biology course

**55.342 MARINE BOTANY**  
**3 semester hours**

Taxonomy, physiology, ecology, and economic importance of marine and coastal plants as exemplified by those found on the Delmarva Peninsula. Laboratory techniques include collecting, preserving, identifying, and analyzing plants and plant materials, appropriate instrumentation to be used. Emphasis on in-the-field studies and laboratory analyses.

Prerequisite: A year of biology or one semester of botany

**55.343 MARINE ICHTHYOLOGY**  
**3 semester hours**

A study of the internal and external structure of fishes, their systematic and ecological relationships, and their distribution in time and space.

Prerequisite: One year of general biology

**55.344 ANATOMY OF MARINE CHORDATES**  
**3 semester hours**

Familiarization with qualitative aspects of speciation. Establishment of understanding of basic and specialized structure and development of marine chordates. Tracing of important trends (and their functional significance) in the evolution of this structure in various vertebrate lines in which there was radiation to or from a marine environment. Laboratory work involves dissection of freshly collected (and preserved) representative marine vertebrates.

Prerequisite: Introductory course in biology or zoology

**55.345 ORNITHOLOGY**  
**3 semester hours**

Course introduces avian fauna of the sea coast and enables comparison with inland species. Field work provides visual and vocal identification; lecture material includes information on distribution, behavior, physiology, and anatomy of birds.

Prerequisite: A year of biology or consent of the instructor

**55.431 ECOLOGY OF MARINE PLANKTON**  
**3 semester hours**

Study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons made between planktonic populations of various types of habitats in relation to primary and secondary productivity.

Prerequisite: A year of biology

**COURSES NOT APPLICABLE TO  
THE BIOLOGY MAJOR**

**50.101 GENERAL BIOLOGY I**

**3 semester hours**

Presents major concepts and principles of biology relating to humans. Lecture and discussion.

**50.102 GENERAL BIOLOGY II**

Studies biology from the ecological, evolutionary, neural, and behavioral perspective with emphasis on mankind.

Prerequisite: 50.101

**50.103 QUEST BIOLOGY**

**3 semester hours**

Studies the biological and environmental relationships with mankind as a participant for survival in a natural setting.  
(Offered summer only.)

**50.111 GENERAL BIOLOGY LABORATORY**

**1 semester hour**

Offers "hands-on" experience emphasizing biological concepts. Two hours laboratory per week. No previous knowledge of biology is necessary.

**50.173 ANATOMY AND PHYSIOLOGY I**  
**4 semester hours**

Provides an introductory course integrating the structure of the function of the human body. This portion covers fundamental principles of anatomy and physiology, the chemical basis of life, cell structure and function, tissues, integumentary system, skeletal system, muscular system, nervous system, and special senses. Three hours lecture/ 3 hours laboratory per week.

**50.174 ANATOMY AND PHYSIOLOGY II**  
**4 semester hours**

Provides an introductory course integrating the structure and function of the human body. This portion covers endocrine system, blood and defense mechanisms, cardiovascular system, lymphatic system, respiratory system, digestive system, metabolism, nutrition, urinary system, fluid and electrolyte balance, reproductive system, growth and development, and human genetics. Three hours lecture/ 3 hours laboratory per week.

Prerequisite: 50.173 or consent of the instructor

**50.205 INTRODUCTION TO NUTRITION**  
**3 semester hours**

Provides students with a foundation of nutritional concepts so that sound nutritional practices can be applied to their personal lives incorporated into their careers. Concepts presented include nutritional requirements for optimal health and performance throughout the lifespan, making food choices in the marketplace, analyzing nutritional information in the media, and controversial issues in nutrition and health.

**50.230 HUMAN SEXUALITY**  
**3 semester hours**

Presents an overview of the role of sexuality in the life of humans. Considers anthropological, biological, psychological, and sociological aspects of sexuality. Addresses values, ethics, and responsible decision making. Field components of this course and student projects will include additional costs. Three hours per week.

**50.231 BIOLOGY OF AGING**  
**3 semester hours**

The biological mechanisms of the aging process are discussed with special emphasis on these processes in humans. Discussions include studies of aging at the molecular, cellular, systems, and organism levels of organizations. Three hours lecture per week.

**50.240 INTRODUCTORY MICROBIOLOGY**  
**3 semester hours**

Presents elementary aspects of morphology, metabolism, and cultivation of bacteria, viruses, and other microorganisms with consideration of their relationship to public health and various industrial processes. Two hours lecture and 2 hours laboratory per week.

**50.254 SOCIAL IMPLICATIONS OF BIOLOGY**  
**3 semester hours**

Relates biology to contemporary problems related to populations, medicine, food, environments, etc. A course designed to encourage students to consider values, ethics, and responsible decision making. Three hours lecture and discussion per week.

**50.281-289 SPECIAL TOPICS, ALLIED HEALTH**  
**1-3 semester hours**

Presents an area of biology or allied health of interest to a general audience.

Prerequisite: Determined by the instructor

**50.366 ANATOMY AND PHYSIOLOGY:  
HEAD, NECK, AND THORAX**

**3 semester hours**

Studies the anatomy, physiology, and development of the head, neck, and thorax. Emphasizes the organ systems that relate to the hearing and speech mechanisms. Three hours lecture/2 hours laboratory per week. (Preference given to communication disorders students.)

(Offered spring semester only.)

# CHEMISTRY

## Faculty

Professors Wayne P. Anderson (chairperson), Barrett W. Benson, Lawrence L. Mack, Roy D. Pointer; Assistant Professors Marlana Blackburn, Christopher P. Hallen, Michael E. Pugh, Emeric Schultz, Kizhanipuram Vinodgopal, Bruce E. Wilcox.

## B.S. in Chemistry

Required Courses: Chemistry 52.111 and 112, or 118, 113, 221, 231, 232, 251, 322, 341, 361, 362, 452, 471, 481, 492; Mathematics 53.125, 126, 225, 271; Physics 54.211, 212; and reading knowledge of scientific German or Russian.

Note: Students who want ACS certification upon graduation must complete the above degree requirements.

## B.A. in Chemistry

Required Courses: Chemistry 52.111 and 112, or 118, 113, 221, 231, 232, 361, 362, 322, 481; Mathematics 53.125, 126, 225, 271; Physics 54.211, 212

## B.S. in Clinical Chemistry

Required Courses: Chemistry 52.111 and 112, or 118, 113, 221, 231, 232, 341, 361, 362, 322, 481; Biology 50.110, 343, 371; Mathematics 53.125, 126, 225, 271; Physics 54.211, 212; clinical year (30 semester hours) at Geisinger Medical Center

Note: Requirements for the chemistry major for the B.S. in Education are found in the section on Secondary Education under the College of Professional Studies.

## Accreditation

The Department of Chemistry is recognized by the Committee on Professional Training of the American Chemical Society (ACS) as one which meets their nationally recognized standards for undergraduate education in chemistry. This recognition is significant for students considering professional employment in the chemical industry and/or those seeking admission to postgraduate education programs in the sciences and medicine. Students meeting the requirements for the B.S. in chemistry are certified by the department to the national office of the ACS and become eligible for membership in the society without the usual two-year waiting period.

## Cooperative Program in Engineering

Students interested in chemical engineering can earn a bachelor's degree in chemistry and a bachelor of science in chemical engineering through a cooperative program with The Pennsylvania State University. Three years at Bloomsburg and two years at Penn State are required for this program. (See details listed under Liberal Arts and Engineering.)

## COURSE DESCRIPTIONS

Chemistry  
(Code 52)

### 52.101 INTRODUCTORY CHEMISTRY

3 semester hours

Presents an introduction to chemistry for students with little or no previous chemical background. Surveys the principles of chemistry with emphasis on the fundamentals of chemical and physical measurements and calculations. Three hours class per week. (This course is not intended to be a beginning course for science majors.)

### 52.103 INTRODUCTORY CHEMISTRY LABORATORY

2 semester hours

Introduces basic chemical principles and laboratory techniques and applies them to common materials. One hour lecture/3 hours laboratory per week.

Prerequisite: 52.101 concurrent or completed

### 52.108 PHYSIOLOGICAL CHEMISTRY

4 semester hours

Surveys the essentials of organic and biochemistry. Includes bonding, structure, nomenclature, organic functional group reactions, and metabolism of biomolecules. Four hours class per week.

Prerequisite: 52.101 or 112 or 118

(Offered spring semester only.)

### 52.111 GENERAL CHEMISTRY I

3 semester hours

First half of a two-semester sequence course offering a systematic survey of the major topics in chemistry as recommended by the American Chemical Society. It is designed to be the first college-level chemistry course for students who are interested in majoring in one of the natural sciences or mathematics. Three hours class per week.

### 52.112 GENERAL CHEMISTRY II

3 semester hours

Continuation of the two semester sequence started in Chemistry 52.111; a survey of chemistry with major emphasis on the application of chemical principles to the solution of chemical and physical problems. Three hours class per week.

Prerequisite: 52.111

### 52.113 CHEMISTRY LABORATORY

2 semester hours

Introduces the theory and practice of fundamental chemistry laboratory techniques including qualitative analysis. One hour lecture/ 3 hours laboratory per week.

Prerequisite: 52.111 or 112 or 118, concurrent or completed

### 52.118 UNIVERSITY CHEMISTRY

4 semester hours

An advanced placement general chemistry course designed for better-prepared science majors and students in the Scholars Program. Course surveys the principles of

chemistry in a four-day-per-week format giving sufficient coverage of subject matter to serve as a prerequisite for all 200-level chemistry courses. Four hours class per week.

Prerequisite: Placement by the Department of Chemistry  
(Offered fall semester only.)

**52.221 QUANTITATIVE ANALYTICAL CHEMISTRY**

**4 semester hours**

Introduces fundamental principles of quantitative chemical analysis utilizing classical and modern techniques. Stresses laboratory skills and calculations of quantitative analysis. Three hours lecture/4 hours laboratory per week.

Prerequisite: 52.112 or 118, 52.113

**52.230 INTRODUCTORY ORGANIC CHEMISTRY**

**4 semester hours**

Survey of functional group organic chemistry. Emphasis on fundamentals of structure, stereochemistry, and reaction mechanisms necessary for an understanding of the chemistry of biomolecules. Not open to chemistry majors. Three hours lecture/3 hours laboratory per week.

Prerequisite: 52.112 or 118, 52.113

**52.231 ORGANIC CHEMISTRY I**

**4 semester hours**

First half of a two-term sequence. Emphasis is on chemistry of hydrocarbons and their derivatives. Molecular structure, stereochemistry, reaction mechanisms, syntheses and analyses of these classes of compounds are covered. Three hours lecture/4 hours laboratory per week.

Prerequisite: 52.112 or 118, 52.113

**52.232 ORGANIC CHEMISTRY II**

**4 semester hours**

A continuation of 52.231. Emphasizes reactions of common functional groups. Spectroscopy and its use in structure determination is introduced. Molecular structure, stereochemistry, reaction mechanisms, syntheses and analyses of representative compounds are covered. Three hours lecture/4 hours laboratory per week.

Prerequisite: 52.231

**52.251 INORGANIC CHEMISTRY**

**3 semester hours**

Applications of the principles of inorganic chemistry to a systematic study of the descriptive chemistry of the elements. Three hours class per week.

Prerequisite: 52.112 or 118  
(Offered spring semester only.)

**52.322 INSTRUMENTAL ANALYTICAL CHEMISTRY**

**4 semester hours**

Presents theory and laboratory applications of some of the instrumental methods of analysis. Topics include chromatography, spectrophotometry, polarography, electroanalysis, and nuclear magnetic resonance. A laboratory-centered course. Three hours lecture/4 hours laboratory per week.

Prerequisite: 52.221, 361  
(Offered spring semester only.)

**52.341 BIOCHEMISTRY**

**4 semester hours**

Emphasizes the structure, reactivity, and metabolic reactions of the naturally occurring bimolecules. Selected topics from the various metabolic pathways (both anabolic and catabolic) are discussed. Introduces the biochemical techniques encountered by the modern biochemist. Three hours lecture/4 hours laboratory per week.

Prerequisite: 52.230 or 232; 52.221 recommended

**52.361 PHYSICAL CHEMISTRY I**

**4 semester hours**

Studies thermodynamics; Gibbs free energy and equilibrium; kinetic theory of gases and solutions; chemical kinetics. Three hours lecture/4 hours laboratory per week.

Prerequisite: 52.112 or 118, 52.113; 53.225; 54.212  
(Offered fall semester only.)

**52.362 PHYSICAL CHEMISTRY II**

**4 semester hours**

Continuation of 52.361; solid state, Schroedinger quantum mechanics, molecular orbital theory; spectroscopy. Three hours lecture/4 hours laboratory per week.

Prerequisite: 52.361  
(Offered spring semester only.)

**52.433 ADVANCED ORGANIC CHEMISTRY**

**3 semester hours**

Presents advanced theory, stereochemistry, and utility of organic reactions. Emphasizes reactive intermediates. Three hours class per week.

Prerequisite: 52.232, 362 or concurrent  
(Offered spring semester only.)

**52.442 ADVANCED TOPICS IN BIOCHEMISTRY**

**3 semester hours**

Emphasizes quantitative treatment of biochemical concepts. Presents further topics in biochemistry. Possible topics of study are enzyme structure and mechanism; recombinant DNA; active transport; biophysical chemistry. Three hours class per week.

Prerequisite: 52.232, 341; 54.212  
(Offered spring semester only.)

**52.452 ADVANCED INORGANIC CHEMISTRY**

**3 semester hours**

Study of advanced principles of inorganic chemistry and areas of current research interest in inorganic chemistry. Three hours class per week.

Prerequisite: 52.251, 362  
(Offered fall semester only.)

**52.463 PHYSICAL CHEMISTRY III****3 semester hours**

An advanced course dealing with specialized topics in physical chemistry. Subject matter varies with interests of the instructor and students, such as polymer chemistry, spectroscopy or kinetics. Three hours class per week.

Prerequisite: 52.362 or consent of the instructor  
(Offered spring semester only.)

**52.471 ADVANCED LABORATORY****4 semester hours**

Integrates laboratory techniques common to organic and inorganic research. Topics include separation, synthesis, isolation, purification, characterization, and structure determination. Two hours lecture/6 hours laboratory per week.

Prerequisite: 52.232, 322  
(Offered fall semester only.)

**52.481 CHEMISTRY SEMINAR****1 semester hour**

Stresses preparation and presentation of scientific papers on important topics in chemistry. Involves the use of the technical literature as a data base in organizing topics for oral presentations to faculty and peers. One hour class per week.  
(Offered spring semester only.)

**52.491 INDEPENDENT STUDY I****SPECIAL TOPICS IN CHEMISTRY****1-3 semester hours**

Takes the form of a directed laboratory or library-oriented investigation of one or more topics of mutual interest to student and instructor. (See section on Independent Study.)

**52.492 INDEPENDENT STUDY II****CHEMICAL RESEARCH****3 semester hours**

Laboratory investigations of selected problems for advanced students under the supervision of a chemistry faculty member. (See section on Independent Study.)

**52.493 HONORS INDEPENDENT STUDY III****CHEMICAL RESEARCH****3 semester hours**

The third semester of a laboratory investigation of selected problems under the supervision of a chemistry faculty member. For students in the Honor's Program only. Approximately 120 hours per semester. (See sections on Independent Study and the Honors Program.)

# COMMUNICATION STUDIES

## Faculty

Professors Richard D. Alderfer, Mary Kenny Badami; Associate Professors Howard N. Schreier, Harry C. Strine III, James E. Tomlinson (chairperson); Assistant Professors Karen Anselm, Dale Bertelsen, Jack Wade, Janice M. Youse

### B.A. in Speech Communication

A major in this degree program constitutes 30 credits.

**Core Courses (9 credits):** 25.103 Public Speaking or 25.104 Interpersonal Communication (Select the course not used to satisfy the university communication requirement); 25.215 Communication Theory; 25.315 Persuasion

**Specialization:** Students may chose an option in interpersonal and organizational communication or an option in public communication—both options require 21 credits.

#### Interpersonal and Organizational Communication Option

Required course (3 credits), 25.445 Organizational Communication; basic theory and performance courses (9 credits), select a minimum of 3 courses from 25.206 Oral Interpretation, 25.218 Discussion, Business and Professional Speech, 25.321 Argumentation, 25.241 Voice and Diction; advanced theory courses (9 credits), select a minimum of 3 courses from 25.492/ 493/ 494/ 495 Special Topics in Communication, 27.332 Public Relations

#### Public Communication Option

Required course (3 credits), 25.205 Rhetorical Theory; vocal skills (3 credits), select a minimum of 1 course from 25.206 Oral Interpretation or 25.241 Voice and Diction; basic theory and performance courses (6 credits), select a minimum of 2 courses from 25.218 Discussion, 25.321 Argumentation, 25.220 Intercultural Communication, 25.307 Business and Professional Speech; advanced theory courses (9 credits), select a minimum of 3 courses from 25.492/ 493/ 494/ 495 Special Topics in Communication

### B.A. in Theater Arts

Contact the chairperson of the Department of Communication Studies or the director of theater for a listing of current requirements in theater.

### B.S. in Education, Communication Certification

Requirements for the major for the B.S. in education are found in the section on Secondary Education under the College of Professional Studies. This degree offers a communication certification with a speech, theater, or nonprint media option. Student has an adviser in both departments.

## **COURSE DESCRIPTIONS**

**Speech Communication  
(Code 25)**

*Cocurricular activity-Forensic Society*

### **25.103 PUBLIC SPEAKING**

**3 semester hours**

A basic course in speech with emphasis on formal speaking and audience reaction.

### **25.104 INTERPERSONAL COMMUNICATION**

**3 semester hours**

Analyzes one-to-one communication for developing and changing behaviors during interpersonal speech communication.

### **25.108 FORENSIC PRACTICUM**

**1 semester hour**

Participation in forensics: debate or individual speaking events. Grade awarded each semester. May be repeated for maximum of 3 semester hours of credit. First semester register for 25.108.01. Second semester register for 25.108.02. Participation for two semesters for one semester hour of credit.

### **25.205 RHETORICAL THEORY**

**3 semester hours**

Highlights major trends in rhetoric from the sophists to contemporary rhetorical theorists.

(Offered fall semester only.)

### **25.206 ORAL INTERPRETATION OF LITERATURE**

**3 semester hours**

Provides practice in skills necessary for conveying intellectual and emotional meanings in poetry and prose read to an audience.

### **25.215 COMMUNICATION THEORY**

**3 semester hours**

Introduces definitions and models of communication as a social science; surveys methods for the scientific study of communication; described recent developments in theories of interpersonal, small group, public, and mass communication.

(Offered spring semester only.)

### **25.218 DISCUSSION**

**3 semester hours**

Presents a survey of and practice in types and patterns of public discussion.

Prerequisite: 25.103 or 104 or consent of instructor

### **25.220 INTERCULTURAL COMMUNICATION**

**3 semester hours**

Provides an overview of speech communication as it relates to socio-cultural differences that reflect ethnic and racial experiences, knowledge, and values.

Prerequisite: 25.103 or 104 or consent of the instructor  
(Offered spring semester only.)

### **25.241 VOICE AND DICTION**

**3 semester hours**

Studies the international phonetic alphabet and the cases of vocal problems.

### **25.307 BUSINESS AND PROFESSIONAL SPEECH**

**3 semester hours**

Studies business and professional communication, salesmanship, conference, and interviewing.

Prerequisite: 25.103 or 104

### **25.315 PERSUASION**

**/421**

**3 semester hours**

Examines the way people use symbols to influence other people. Provides practice in presenting and evaluating persuasive messages.

Prerequisite: 25.103 or 104

### **25.321 ARGUMENTATION**

**3 semester hours**

Examines basic principles of argument and evidence. Provides practice through presentation and refutation of arguments in debates on controversial issues.

Prerequisite: 25.103 or 104

(Offered spring semester only.)

### **25.445 ORGANIZATIONAL COMMUNICATION**

**3 semester hours**

Explores theoretical and practical aspects of how communication patterns develop in organizations. Open to both graduate and undergraduate students.

### **25.470 INDEPENDENT STUDY**

**1-3 semester hours**

Provides for individual work and study in one of the areas of rhetoric and communication. Student finds faculty sponsor, prepares written proposal that requires departmental recommendation and the dean's approval arranged through the chairperson.

(See section on **Preprofessional and Career Advisement**.)

### **25.492 SPECIAL TOPICS IN COMMUNICATION**

**/493/494/495**

**3 semester hours**

Investigates significant aspects for speech communication. Topics, which vary by semester, include Communication and Sexes, Conflict and Communication, Communication Training in Organizations, Intercultural Communication, Theories and Techniques of Interviewing. Consult the schedule booklet or the listed instructor for further information.

Prerequisite: 9 semester hours in speech communication courses

## **COURSE DESCRIPTIONS**

### **Theater Arts (Code 26)**

Cocurricular activity-Bloomsburg Players

See Secondary Education for B.S. in Education,  
Communication Certification (Theater option)

#### **26.103 INTRODUCTION TO THEATER ARTS**

**/208 3 semester hours**

Presents a survey: criticism, direction, play production, theater history, stage design, and acting.

(Offered fall semester only.)

#### **26.108 THEATER PRACTICUM**

**1 semester hour**

Participation in plays: acting or technical work. Grade awarded each semester. Participation for two semesters for one semester hour of credit. May be repeated for maximum of three semester hours.

#### **26.112 FUNDAMENTALS OF ACTING**

**3 semester hours**

Introduces the theories and techniques of acting. Provides for individual and group exercises.

(Offered fall semester only.)

#### **26.211 THEATER PRODUCTION/ STAGECRAFT**

**3 semester hours**

Studies basic stagecraft: scene construction, painting, drafting, and crewing of a show. Laboratory work required.

(Offered fall semester only.)

#### **26.215 HISTORY OF THE THEATER**

**/415 3 semester hours**

Surveys structures, production practices, and plays from the beginning to Ibsen.

(Offered spring semester only.)

#### **26.219 CHILDREN'S THEATER**

**/319 3 semester hours**

A survey of history, theory, and production of theater for young audiences.

(Offered fall semester only.)

#### **26.251 THEORY OF STAGE LIGHTING**

**/314 AND DESIGN 3 semester hours**

Provides for intensive study of theory; design of lighting of a production supplemented by applied work on productions. Laboratory hours required.

(Offered spring semester only.)

#### **26.311 SCENE DESIGN**

**3 semester hours**

Study of scene designs, working drawings of perspective, oblique, and isometric projections, drafting of floor plans,

rear, and front elevations. Basic pictorial expressions necessary to communicate in scene design.

Requires laboratory hours.  
(Offered spring semester only.)

#### **26.316 PLAY DIRECTING**

**/411 3 semester hours**

Studies the principles and techniques of play direction exercises, and production.

Prerequisite: One theater course  
(Offered spring semester only.)

#### **26.318 CREATIVE DRAMATICS**

**3 semester hours**

Teaches a series of theater games and improvisation to develop imagination and creativity. The use of drama as a teaching tool.

(Offered spring semester only.)

#### **26.321 THEATER AND STAGE MANAGEMENT**

**3 semester hours**

Prepares students for professionalism in production of plays, films, television, and radio shows.

(Offered fall semester only.)

#### **26.340 SCRIPTWRITING**

**3 semester hours**

Studies dramatic structure, types, and styles of drama. Student required to write scripts for stage, film, radio, or television.

Prerequisite: One writing course or consent of the instructor

#### **26.414 COSTUMING FOR THE STAGE**

**3 semester hours**

Reviews historical developments and elements of costume design.

(Offered fall semester only.)

#### **26.470 INDEPENDENT STUDY**

**1-3 semester hours**

Provides for individual work and study in one of the areas of theater. Student finds faculty sponsor and prepares a written proposal, which requires departmental recommendation and dean's approval, arranged through the chairperson. (See section on Preprofessional and Career Advisement.)

#### **26.490 SEMINAR: THEATER**

**3 semester hours**

Provides for a concentrated study of an individual artist, a period or a movement in theater.

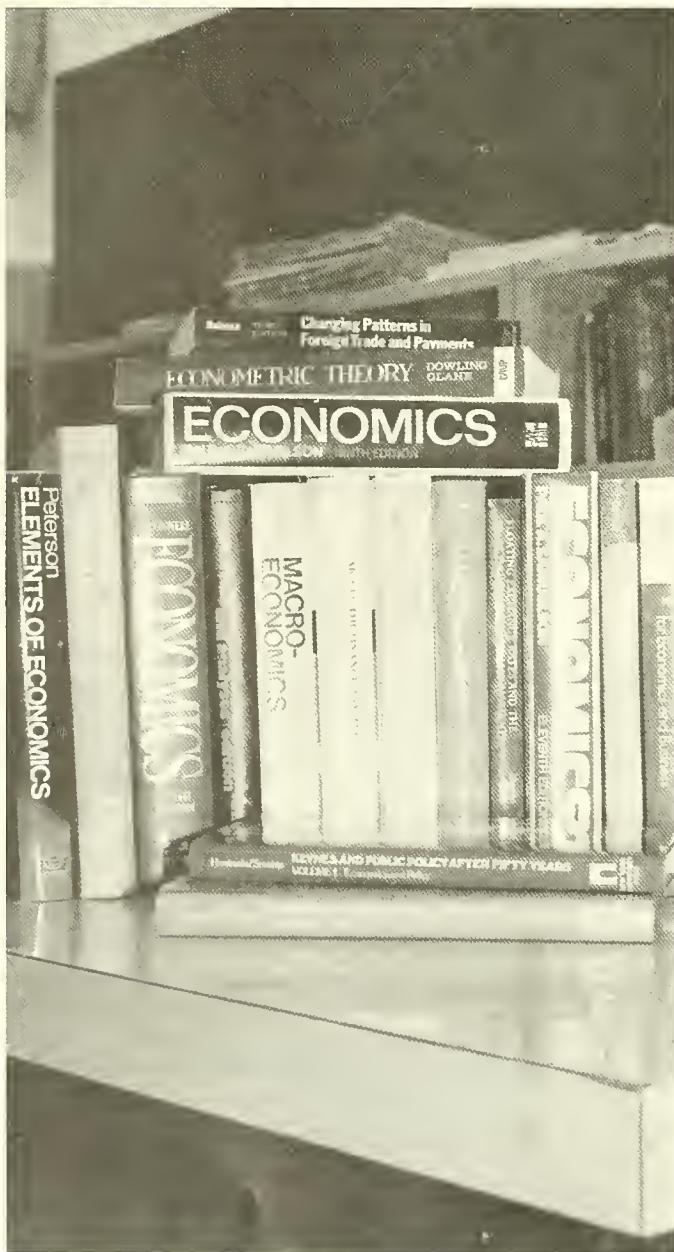
Prerequisite: 9 semester hours in theater or consent of the instructor.

(Offered on demand.) For theater internship, see 27.497.

# COMPUTER AND INFORMATION SCIENCE

The bachelor of science in computer and information science is offered jointly by the Department of Mathematics and Computer Science in the College of Arts and Sciences and by the Department of Computer and Information Systems in the College of Business.

The Arts and Sciences' curriculum is centered on the design, production, and analysis of software. Practical and theoretical issues are addressed by the curriculum that uses mathematics as an essential tool. In addition, aspects of computer hardware that are needed for the study of software are explored. The program is designed to prepare the student for either further study in computer science or for employment in the software industry. Specific course requirements for the degree are listed under the Department of Mathematics and Computer Science.



# ECONOMICS

## Faculty

Professors Ujagar Bawa, Peter H. Bohling, Saleem M. Kahn, W.B. Lee (chairperson), TejBhan S. Saini; Associate Professors George B. N. Ayittey, Mehdi Haririyan, Robert MacMurray, Rajesh K. Mohindru, Robert Ross

### B.A. and B.S. in Economics

**Required Courses:** Economics 40.211, 212, 311, 312, 346, and one of the following options or concentration. Electives in economics, business, and political science in any of the options require the adviser's approval.

**B.A./Option I**—Intended for general study of economics. One course from Economics 40.246 or Mathematics 53.125; 27 semester hours electives in economics that include Economics 40.400 or 40.446.

**B.A./Option II**—Intended for the student interested in political economy and who hopes to enter a career in some aspect of international relations or trade: Political Science 44.120, 336; Economics 40.315, 422, 460, 6 semester hours electives in economics; 9 semester hours electives in political science.

The following pairs of courses in economics and political science are recommended as pertinent to the purpose of Option II: 40.423 paired with 44.405; 40.422 with 44.366; 40.433 with 44.383; 40.316 with 44.452; 40.410 with 44.336; 40.315 with 44.331. Study of a foreign language is recommended.

**B.S./Concentration**—Intended for the student interested in analytical study of economics related to business. Courses: Business 91.221 and 222 or 91.220 and 223, Business 93.345, 96.313, 97.310; Computer Science 53.175; 15 semester hours electives in economics, which include Economics 40.446.

### Minor in Economics

The minor provides a basic competence in economics for non-economics majors and constitutes 12 semester hours.

**Core Requirements:** Economics 40.211, 212, 311, and 312; 6 semester hours elective in economics chosen from General Economics Theory (Economics 40.313, 315, 316, 410, 413, and 433), Statistical Analysis (Economics 40.346, 400, and 446), and Economic History and Systems (Economics 40.422, 423, 424, 434, and 460).

### COURSE DESCRIPTIONS

#### Economics (Code 40)

##### 40.211 PRINCIPLES OF ECONOMICS I

3 semester hours

Studies macroeconomics: nature of the economic problem; economic concepts; institutional framework; supply,

demand, and the price system; national income accounting; determination of output and employment levels; consumption, saving, and investment behavior; business cycles; inflation and unemployment; monetary and fiscal institutions and theory; economic growth.

**40.212 PRINCIPLES OF ECONOMICS II**  
3 semester hours

Studies microeconomics: supply, demand, the price system; theory of consumer behavior and the firm; cost and production analysis, output and price determination, resource allocation, and determination of factor incomes under perfect and imperfect markets; current economic problems; and international economics.

Prerequisites: 40.211

**40.246 BUSINESS AND ECONOMIC MATHEMATICS**  
3 semester hours

Presents an introduction to basic mathematical tools most frequently employed in economics and business, e.g., systems of linear equations, inequalities, elements of linear programming, matrix algebra, logarithms, mathematics of finance, and differential and integral calculus.

**40.311 INTERMEDIATE MICRO-THEORY AND MANAGERIAL ECONOMICS**  
3 semester hours

Reviews the theory of consumer behavior and the firm; output and price determination under different market systems; pure competition, pure monopoly, oligopoly and monopolistic competition; production and cost analysis; allocation of resource and distribution of income; comparison of behaviors of competitive, monopolistic, and oligopolistic product and resource markets; constrained and nonconstrained optimization techniques and their applications to business decisions and business practices; welfare economics.

Prerequisite: 40.211, 212, 246

**40.312 INTERMEDIATE MACROECONOMIC THEORY**  
3 semester hours

Stresses the national income analysis; theory of income determination, employment, and price levels; monetary and fiscal institutions; theory and policy; investment, interest, and demand for money; business cycles; inflation and unemployment; national debt; macroeconomic equilibrium; prices, wages, and aggregate supply, economic growth, foreign trade and balance of payments; economic policy.

Prerequisite: 40.211, 212, 246

**40.313 LABOR ECONOMICS**  
3 semester hours

Presents the economics of the labor market; supply of and demand for labor; nature and theory of wages; productivity and inflation; unionism; historical development; theories of labor movements; trade union governance; collective bargaining; government interventions and public policy.

Prerequisite: 40.212  
(Offered fall semester only.)

**40.315 BUSINESS AND GOVERNMENT**

3 semester hours

Surveys government policies for maintaining competition, for substitution regulation in place of competition and for substituting public for private enterprise; tests of various government policies in the light of economic theory and historical experience.

Prerequisite: 40.212

**40.316 URBAN ECONOMICS**

3 semester hours

Applies economic theory and recent empirical findings to urban resource use. Analyzes problems of unemployment, housing, education, transportation, pollution, and equal opportunity.

Prerequisite: 40.212

(Offered fall semester only.)

**40.317 POPULATION AND RESOURCE PROBLEMS**

3 semester hours

Reviews classical theories of population growth; recent economic models of population correlating natural resources; capital accumulation and technological change; and population problems in North America, European, and developing countries. Analyzes recent trends in birth and death rates as factors in population growth. Studies measures of population and labor force, their distribution by age, sex, occupation, regions; techniques for projecting population levels.

Prerequisite: 40.212

(Not offered on a regular basis.)

**40.346 BUSINESS AND ECONOMICS STATISTICS I**

3 semester hours

Presents descriptive statistics, averages, dispersion, elements of probability, index numbers, time series, introduction to regression, and correlation analysis, theory of estimation, and testing of hypothesis as applied to business and economic problems.

Prerequisite: 40.212

**40.400 INTRODUCTION TO ECONOMETRICS**  
3 semester hours

Applies modern statistical methods to economic problems; time series and cross-sectional analysis of measurements of demand and costs; macroeconomics models; income distribution and growth model.

Prerequisite: 40.212

**40.410 PUBLIC FINANCE**

3 semester hours

Analyzes revenues and expenditures of local, state, and national government in light of micro and macrotheory; criteria and models of government services; subsidies, etc., principles of taxation, public borrowing, and public debt management; impact of fiscal and budgetary policy on resource and income allocation, internal price and employment stability; the rate of growth and world economy.

Prerequisite: 40.212

**40.413 MONEY AND BANKING****3 semester hours**

Reviews the historical background and development of monetary practices and principles of banking with special attention given to commercial banking and credit regulations and current monetary and banking development.

Prerequisite: 40.212

**40.415 ENVIRONMENTAL ECONOMICS****3 semester hours**

A study of the economics of environmental quality. Environmental facts and social circumstances are examined with particular emphasis on market and non-market solutions to the environmental problems. Topics include the private market and its efficiency, externalities, environmental quality as a public good, income distribution effects of government environmental quality as a public good, income distribution effects of government environmental programs; water resources and water quality, problem of air quality, and quality of life and other environmental problems; prohibitions on, and regulation of, polluting activities, taxes, subsidies, and effluent charges; population, economic growth, and environmental quality.

**40.422 CONTRASTING ECONOMICS****3 semester hours**

Outlines theories of capitalism and socialism with special emphasis on Marxian theory. Compares the theoretical and actual performance of capitalism, socialism, and communism.

Prerequisite: 40.212

(Offered spring semester only.)

**40.423 HISTORY OF ECONOMIC THOUGHT****3 semester hours**

Surveys economic theories propounded in the past and their effect on present-day thinking about economic, business, and political systems. The surplus value theory; economic planning as part of government responsibility; relation of family budgets to Engel's Law; government responsibility for employment and rent control.

Prerequisite: 40.212

(Offered spring semester only.)

**40.424 ECONOMIC HISTORY OF THE WESTERN WORLD****3 semester hours**

Presents a comparative analysis of the economic theory of Europe and the United States with particular attention to the interplay of changes in business, financial and labor institutions, products and production, adaptations to resource differences, and conflicting economic doctrines.

Prerequisite: 40.212

(Offered fall semester only.)

**40.433 INTERNATIONAL ECONOMICS****3 semester hours**

Addresses the pure theory of international trade. Outlines gains from trade; free trade and protection; balance of payments; foreign exchange and capital movements; the dollar

and the international monetary system and international liquidity shortage.

Prerequisite: 40.212

(Offered spring semester only.)

**40.434 ECONOMIC GROWTH OF UNDERDEVELOPED AREAS****3 semester hours**

Presents studies of stagnating economies; theories of underdevelopment; operative resistances to economic growth; role of capital, labor, population growth, and technological advance; development planning and trade in development settings.

Prerequisite: 40.212

(Offered fall semester only.)

**40.446 BUSINESS AND ECONOMIC STATISTICS II****3 semester hours**

Presents sampling and sampling distributions; probability; tests of hypothesis; decision making; regression and correlation analysis contingency tables, analysis of variance; designs of experiments; computer applications.

Prerequisite: 40.212, 346

**40.460 ADVANCED POLITICAL ECONOMY****3 semester hours**

Applies economic and political models of social decision making to historical problems from local through international levels. Presents an evaluation of market; political and mixed techniques in particular areas from the 18th through the 20th centuries.

Prerequisite: 40.212

(Not offered on a regular basis.)

**40.470 SENIOR SEMINAR****3 semester hours**

Discusses current literature on economic theory and economic policy. Students read one journal article a week on which they write a report and make a seminar presentation.

Prerequisite: Senior standing or consent of the instructor  
(Offered spring semester only.)**40.490 INDEPENDENT STUDY IN ECONOMICS****1-3 semester hours**

Provides students with an opportunity to receive individualized instruction as they pursue indepth inquiries into previously specified subject matter of special interest within the field of economics. Topic and outline must be developed with a faculty sponsor and approved by the department during the preceding semester of residence.

(See section on Preprofessional and Career Advisement.)

# **ENGLISH**

## **Faculty**

Professors William M. Baillie, Lawrence B. Fuller, Susan Rusinko (assistant chairperson), Gerald H. Strauss, Louis F. Thompson (chairperson); Associate Professors M. Dale Anderson, William D. Eisenberg, Ronald A. Ferdock, Nancy E. Gill, Ervane F. Gulley, Glenn E. Sadler, Riley B. Smith; Assistant Professors Mary G. Bernath, M. A. Rafey Habib, S. Michael McCully, Robert G. Meeker, Marion B. Petrillo, Danny L. Robinson; Instructors Edwin P. Moses, Louise M. Stone.

### **B.A. in English**

20.120, 220, 221, 222, 223, 363, 493

20.301 or 302

One course from 20.311, 312, 411, 413

20.488, 489, or 490

One course from 20.341, 342, 343, 344, 345, 360, 370, 381, 482

Three 300-level or 400-level English Department literature courses

### **Minor in English:**

20.120 World Literature I (3 semester hours)

20.221 British Writers II (3 semester hours)

20.223 American Literature II (3 semester hours)

20.363 Shakespeare (3 semester hours) and two English Department courses (6 semester hours) at the 300-400 level, excluding courses not applicable to a major in English

**Journalism:** See Mass Communications Department programs and courses.

## **COURSE DESCRIPTIONS**

### **English**

(Code 20)

**The student must take English 20.101 and 20.200 or 201 (6 semester hours) or, if selected on basis of admission criteria, the student takes English 20.104 only (3 semester hours).**

### **20.101 COMPOSITION I**

3 semester hours

Study and practice of the principles of composition to improve proficiency in writing skills.

### **20.104 HONORS COMPOSITION**

3 semester hours

Similar to 20.101 but offered only to freshmen exempted from 20.101 on the basis of admission criteria. Students who successfully complete 20.104 are exempt from 20.200 and 201.

### **20.111 LANGUAGE AND SOCIAL INTERACTION**

3 semester hours

A study of varieties of language, verbal and non-verbal, and their communicative and social functions.

Not applicable toward a major in English.

### **20.112 PRACTICAL GRAMMAR AND USAGE**

3 semester hours

A study of grammatical forms, rules, and accepted usage of current written standard English, with practical application to develop skills toward the improvement of diction, sentence structure, and style.

Not applicable toward a major in English.

### **20.120 WORLD LITERATURE I**

3 semester hours

A survey of important literary works of the Western world from the Old Testament and classical Greece through the Renaissance.

### **20.121 WORLD LITERATURE II**

3 semester hours

A survey of important literary works of the Western world from the 17th century to the present.

### **20.131 THE BIBLE AS LITERATURE**

3 semester hours

Examination of literary types found in the Old and New Testaments and their profound influence on Western culture.

Not applicable toward a major in English.

### **20.151 INTRODUCTION TO LITERATURE**

3 semester hours

A basic course exploring literature as experience and the techniques by which it communicates in short story, novel, drama, and poem.

Not applicable toward a major in English.

### **20.153 FOLKLORE**

3 semester hours

A survey of such traditional forms of oral literature as epic, ballad, folksong, folktale, and superstitions examined in terms of origin, transmission, and influence on literature.

Not applicable toward a major in English.

### **20.200 WRITING PROFICIENCY EXAMINATION**

3 semester hours

A series of compositions written under examination conditions on topics provided by the staff. Faculty consultations and a writing laboratory are available for students in the course.

Prerequisite: 20.101

### **20.201 COMPOSITION II**

3 semester hours

An alternative to English 200, Writing Proficiency Examination. Includes a series of themes, a long paper, and practice in library research to reinforce and expand skills acquired in Composition I.

Prerequisite: 20.101

<b>20.220 BRITISH WRITERS I</b>	<b>3 semester hours</b>	A survey of selections from Chaucer through Boswell and Johnson.	publication. Consideration of various literary types and techniques with discussion of field research in writing nonfiction, fiction, and poetry for children.
<b>20.221 BRITISH WRITERS II</b>	<b>3 semester hours</b>	A survey of selections from Wordsworth through Eliot.	Prerequisite: 20.351 or 352 or consent of the instructor
<b>20.222 AMERICAN LITERATURE I</b>	<b>3 semester hours</b>	A survey of American literature from its colonial beginnings through the Civil War with emphasis on the writers of the American Renaissance.	
<b>20.223 AMERICAN LITERATURE II</b>	<b>3 semester hours</b>	A survey of American literature from the Civil War through the modern era.	
<b>20.224 NON-WESTERN LITERATURE I</b>	<b>3 semester hours</b>	A survey of forms, themes, and social contexts of non-Western literature, based on representative samples from Arabic, Persian, and Indian writings.	
<b>20.225 NON-WESTERN LITERATURE II</b>	<b>3 semester hours</b>	A survey of forms, themes and social contexts of non-Western literature, based on representative samples from Hebrew, Chinese, and African writings.	
<b>20.231 LITERATURE AND SOCIETY</b>	<b>3 semester hours</b>	Readings to consider purposes, characteristics, issues, and values of specific areas—such as business, psychology, and science—from a humanistic perspective. Not applicable toward a major in English.	
<b>20.232 POPULAR LITERATURE</b>	<b>3 semester hours</b>	Study of one type of popular literature, with examination of its forms, conventions, and ideas. Course content, determined by instructor, will vary. Possible topics include detective fiction, science fiction, literature of terror, and popular drama. Not applicable toward a major in English.	
<b>20.251 LITERARY GENRES</b>	<b>3 semester hours</b>	Literary form as a vehicle for expression of ideas.	
<b>20.280 POETRY</b>	<b>3 semester hours</b>	Exploration of the nature of poetry in terms of its aims, forms, and substance.	
<b>20.300 WRITING CHILDREN'S LITERATURE</b>	<b>3 semester hours</b>	Approaches and practice in writing children's books for	
62/COLLEGE OF ARTS AND SCIENCES			
<b>20.301 CREATIVE WRITING: FICTION</b>	<b>3 semester hours</b>	Original creative work in fiction; critical analysis by the instructor and the class in group discussion.	
<b>20.302 ADVANCED COMPOSITION</b>	<b>3 semester hours</b>	Designed to develop in the student a greater mastery over the elements of writing. Attention is given to the problem of evaluating writing.	
		Prerequisite: 60 semester hours completed	
<b>20.303 CREATIVE WRITING: POETRY</b>	<b>3 semester hours</b>	Lecture and discussion concerning the fundamental theory and techniques of poetry writing together with writing and evaluation of poems in a workshop situation.	
		Prerequisite: 20.280, 380, or consent of the instructor	
<b>20.306 THEORY AND PRACTICE OF WRITING</b>	<b>3 semester hours</b>	An introduction to new theories of writing and the teaching of writing including both study of and practice in the methods the theories require. Recommended for secondary education students in English but open to all students interested in advanced work in writing.	
		Prerequisite: 45 semester hours completed	
<b>20.311 STRUCTURE OF ENGLISH</b>	<b>3 semester hours</b>	A study of the sound patterns, morphology, word formation processes, semantics, and syntax of modern English, and of children's acquisition of their first language.	
		Prerequisite: 45 semester hours completed	
<b>20.312 HISTORY OF THE ENGLISH LANGUAGE</b>	<b>3 semester hours</b>	A survey of the major developments in the English language from its Anglo-Saxon origins to the present.	
		Prerequisite: 60 semester hours completed, or consent of the instructor	
<b>20.331 IDEAS IN LITERATURE</b>	<b>3 semester hours</b>	An examination of such recurrent concepts in literature as freedom and fate, good and evil, and social and psychological influences.	
<b>20.332 RUSSIAN LITERATURE IN TRANSLATION</b>	<b>3 semester hours</b>	An introduction to Russian literature from Pushkin to the present. Readings in English of novels, poems, plays, and short stories.	

**20.333 LATER AMERICAN PROSE**

3 semester hours

A study of prose work of American literature, both fiction and non-fiction, from the late 19th century to the present, emphasizing literary merit and social significance. Includes such writers as Riis, Steffens, Sinclair, Allen, E.B. White, Thurber, Baldwin, Ellison, Steinbeck, Barrio, and Momaday.

**20.334 MAJOR AMERICAN WRITERS**

3 semester hours

A study of major American writers instrumental in shaping and interpreting the American experience. Writers included will vary with each presentation of the course.

**20.336, MAJOR BRITISH WRITERS**

/337/338

3 semester hours

A study of major British writers instrumental in shaping and interpreting British literature and the British mind and experience. Writers included will vary with each presentation of the course.

**20.341 EARLY AND MIDDLE ENGLISH LITERATURE**

3 semester hours

A study of *Beowulf* and other English works in translation and medieval chronicles and romances including *Sir Gawain and the Green Knight* and *Le Morte d'Arthur*.

**20.342 16TH CENTURY LITERATURE**

3 semester hours

The nondramatic prose and verse of the period emphasizing the last quarter of the century. Includes the humanists: Erasmus, More, Castiglione, Elyot, Ascham; Renaissance forms and ideas in Llyly, Sidney, Spenser, Daniel, Drayton, Shakespeare, Marlowe, Chapman, Greene, and others.

**20.343 17TH CENTURY LITERATURE**

3 semester hours

Poetry and prose beginning with Jonson. The rival traditions of Donne and Jonson in such poets as Herbert, Vaughan, Quarles, Cowley, Herrick, and Marvell. Principal prose writers: Burton, Browne, Taylor, Fuller, Baxter, Bunyan, and Dryden.

**20.344 18TH CENTURY LITERATURE**

3 semester hours

Literature of the Augustan Age in England: Addison and Steele, Swift, Pope, Boswell, and Johnson; forerunners of the Romantic Revival; beginnings of the British novel; the plays of Addison, Steele, Sheridan, and Goldsmith.

**20.345 19TH CENTURY LITERATURE**

3 semester hours

Literature of the Romantic and Victorian periods in England, including such writers as Wordsworth, Keats, Hazlitt, Lamb, Browning, Tennyson, and Arnold.

**20.351 LITERATURE FOR CHILDREN**

3 semester hours

A study of the development of the various types of literature for children. Consideration of criteria for selecting literature for the classroom and the library, suggestions for presenting literary works in the elementary classroom.

Prerequisite: 60 semester hours completed. Not applicable toward an Arts and Sciences major in English.

**20.352 LITERATURE FOR YOUNG ADULTS**

3 semester hours

Critical discussion of literature aimed at young adult readers or popular with them. Works by writers such as S. E. Hinton, Robert Cormier, Judy Blume, and Paul Zindel. Consideration of literary works for the secondary classroom with attention to the topic of censorship.

Prerequisite: 60 semester hours completed. Not applicable toward an Arts and Sciences major in English.

**30.360 EARLY ENGLISH DRAMA**

3 semester hours

Early native drama including miracle and mystery plays, morality plays, and interludes. Elizabethan dramatists: Heywood, Marlowe, Kyd, Jonson, Webster, Middleton, and Ford.

**20.362 MODERN DRAMA**

3 semester hours

Major continental, English, and American plays from Ibsen to the present with emphasis on contemporary attitudes, themes, and style, as contrasted with those of the traditional dramatists.

**20.363 SHAKESPEARE**

3 semester hours

Study of Shakespeare's plays with emphasis on Shakespeare as poet and playwright and with attention to conditions of the Elizabethan theater and the history of the Shakespearean text.

**20.370 THE ENGLISH NOVEL**

3 semester hours

History and development of the novel in England from its inception to the end of the 19th century.

**20.372 MODERN NOVEL**

3 semester hours

A study of major modern novels, with emphasis on developments in fictional art, particularly realism, naturalism, impressionism, and expressionism. Begins with early realists and moves through the writings of Mann, Proust, Lawrence, Kafka, Woolf, Joyce, and/or one or two others of the instructor's choice.

**20.373 AMERICAN NOVEL**

3 semester hours

The development of the novel in America from its beginning to the present with an emphasis on form, theme, and literary and social movements and some attention to parallel developments in the European novel.

**20.374 SHORT STORY****3 semester hours**

A study of the history, characteristics, and techniques of the modern short story through reading and analyzing representative samples of the genre.

**20.380 MODERN POETRY****3 semester hours**

An introduction to contemporary poetic movements through study of Emily Dickinson, T. S. Eliot, W.B. Yeats, E. E. Cummings, Robert Lowell, Allen Ginsberg, Thomas Hardy, Gerard Manley Hopkins, W. H. Auden, Dylan Thomas, and other poets.

**20.381 CHAUCER****3 semester hours**

Chaucer's major poetry with practice in speaking and reading Middle English and an emphasis on Chaucer's literary achievement and his humanism.

**20.400 LITERARY STUDY ABROAD****3 semester hours**

A travel-study course for English majors and non-majors, concentrating on a writer or literary problem in the perspective of their disciplines. Includes meetings with writers and scholars and use of native sources and resources. Area of emphasis determined by the instructor.

**20.411 MODERN LINGUISTIC THEORY****3 semester hours**

A survey of modern developments in linguistics with special attention to transformational-generative grammar; applications of theory to patterns of language acquisition; current adaptations of theory for presentation as grammar in schools.

Prerequisite: 60 semester hours completed

**20.413 LANGUAGE IN AMERICAN SOCIETY****3 semester hours**

A review of social, political, and philosophical perspectives on the historical development and current status of English and other languages in American society.

Prerequisite: 60 semester hours completed  
(See section on Preprofessional and Career Advisement.)

**20.440 INDEPENDENT STUDY IN ENGLISH****3-6 semester hours**

Prerequisite: 60 semester hours completed

**20.482 MILTON****3 semester hours**

The poetry and prose of John Milton.

**20.488 SEMINAR****/489/490****3 semester hours**

Independent study with an opportunity to explore a literary subject not offered in regularly scheduled courses. Content, determined by the instructor, varies each time the

course is offered. Open to non-English majors.

Prerequisite: 60 semester hours completed  
(Offered spring semester only.)

**20.492 LITERARY CRITICISM****3 semester hours**

Examination of major critics from Aristotle to the present, emphasizing the application of critical principles to primary genres of drama, poetry, and novel.

Prerequisite: 60 semester hours completed

**20.493 BIBLIOGRAPHY AND LITERARY RESEARCH****3 semester hours**

Methods of literary scholarship and study of book production with practice in preparing specialized bibliographies and planning scholarly projects.

Prerequisite: 60 semester hours completed  
(Offered fall semester only.)

**20.494 RHETORIC OF LITERATURE****3 semester hours**

A systematic study of the major rhetorical devices used by writers in the various literary genres: the nature and range of rhetorical designs from the shortest communications to the whole composition; definitions of concepts; identification and location of these language devices in representative works of drama, prose, and poetry; description of functions and analysis of communication effects on the reading audience.

Prerequisite: 60 semester hours completed

**20.497 ENGLISH INTERNSHIP****1-6 semester hours**

A work-study program. Not applicable toward requirements of English major and minor programs. Open to English majors and others by departmental permission.

Prerequisite: 60 semester hours completed.

# GEOGRAPHY AND EARTH SCIENCE

## Faculty

Professors Duane D. Braun, Wendelin R. Frantz, Lee C. Hopple, James T. Lorelli, Brian A. Johnson; Associate Professors Norman M. Gillmeister, James R. Lauffer (chairperson), Mark A. Hornberger, Joseph R. Pifer, Nicholas M. Short; Assistant Professors John J. Serff Jr., Dale Ann Springer, George E. Stetson

## B.A. in Geography and Earth Science

*Option I* - 41.101, 102; 24 semester hours in code 41 courses.

*Option II* - (Emphasis on Urban and Regional Planning); 21 semester hours required in planning including 41.105, 150, 350, 497, and 498; 15 semester hours from 41.101, 221, 258, 302, 310, 315, 363, 51.105; 19 semester hours from 09.231, 25.103, 41.242, 41.264, 53.141, 53.175; 3 semester hours from 40.211, 212, 316, 410; 6 semester hours from 44.101, 452; and 3 semester hours from 45.211, 213, 316, 457, 468

*Option III* - (Emphasis on Environmental Planning); 33 semester hours required in planning including 41.150, 258, 301, 302, 497, 498, 44.452; 6 semester hours from 41.101, 105, 125, 310, 315, 51.105 (**Note:** Only one 100-level course may be selected.) 15 semester hours from 09.231, 25.103, 53.141, 175, 41.242, 264; 6 semester hours from 40.415, 44.456, 50.351, 54.105

## Minor in Geography

A minor in geography constitutes 18 semester hours including courses 41.105, 258, 301, and 302.

## B.S. in Geography and Earth Science

Earth Science 51.101, 102, 111, 112, 253, 255, 259; plus three additional courses elected from 51.105, 355, 261, 262, 360, 365, 369, 370, 453, 461, 462, 468, 470, 475, and approved courses offered by the Marine Science Consortium; Mathematics 53.175 plus two courses selected from 53.112, 113, 123, 124, 125, 126, 141, 271; Chemistry 52.111, 112, 113; Physics 54.111, 112

A maximum of 9 semester hours from the Marine Science Consortium may be applied. See Marine Science for additional electives in earth science.

## B.S. in Geology

Earth Science 51.101, 102, 111, 112, 261, 262, 360, 365, 369, 370, or 470, 468, 493; Mathematics 53.175, 141, 123, 124, or 125, 126, 175; Chemistry 52.111, 112, 113; Physics 54.111, 112, or 211, 212

## COURSE DESCRIPTIONS

### Geography (Code 41)

#### 41.101 WORLD PHYSICAL GEOGRAPHY

3 semester hours

Studies earth-sun relationships, land masses, oceans, landforms, weather and climate, and natural resources as elements and controls related to the adjustments man makes to his environment.

#### 41.102 WORLD CULTURAL GEOGRAPHY

3 semester hours

Demonstrates the relationship of man, land, culture, and economic activities.

#### 41.105 ENVIRONMENTAL ISSUES AND CHOICES

3 semester hours

Examines contemporary environmental resource issues within a values, ethics, and decision-making framework.

#### 41.125 WEATHER AND CLIMATE

3 semester hours

Studies the interrelationships between the elements of weather and climate; the functional application of these elements is elaborated upon through a study of climatic realms.

#### 41.150 ELEMENTS OF PLANNING

3 semester hours

Acquaints students with the philosophy of planning, the roles of the planner, and planning objectives.

#### 41.200 GEOGRAPHY OF UNITED STATES AND CANADA

3 semester hours

Presents a spatial analysis of the United States and Canada emphasizing such concepts as environmental perception and sequent occupancy; considers salient problems within geographic regions in terms of genesis and potential for solution.

#### 41.201 GEOGRAPHY OF EUROPE

3 semester hours

Studies Europe's physical characteristics, topography, transportation systems, resources, populations, and trade.

#### 41.202 GEOGRAPHY OF LATIN AMERICA

3 semester hours

Examines Latin America as a major geographic region in terms of those economic, racial, and cultural forms that have provided regional unity and diversity.

#### 41.221 ECONOMIC GEOGRAPHY

3 semester hours

Reviews major economic activities; focuses on significant characteristics, location theory, and spatial patterns.

**41.242 MAP SKILLS****3 semester hours**

Uses a variety of published maps for interpreting and interrelating past and present physical and cultural phenomena with a view toward the future.

**41.253 LANDFORMS****3 semester hours**

Studies dynamic, tectonic, and gradational forces, which in conjunction with climate and biologic forces, have shaped the earth into its present form and continuously refashion and modify it.

**41.256 CLIMATOLOGY****3 semester hours**

Analyzes climate (temperature, moisture, pressure, wind, air masses, and storms) and the worldwide distribution of climates.

**41.258 ENVIRONMENTAL CONSERVATION****3 semester hours**

Identifies resource management and environmental problems and offers possible alternative solutions for these problems.

**41.264 APPLIED CARTOGRAPHY****4 semester hours**

Fundamental principles, use of graphic media, methods of construction, use and interpretation of maps, models, charts, and diagrams, utilized in geography and in urban and regional planning.

**41.281 SPECIAL TOPICS IN GEOGRAPHY****/289****3 semester hours**

Present areas of geographic interest to a general audience.

**41.301 WATER RESOURCES MANAGEMENT****3 semester hours**

An examination of contemporary water resource issues related to environmental planning and management.

**41.302 LAND RESOURCES MANAGEMENT****3 semester hours**

An examination of selected land-related issues and problems with the objective of identifying appropriate management techniques.

**41.310 POPULATION GEOGRAPHY****3 semester hours**

Analyzes physical, human, and economic factors that influence the changing pattern of the political map of the world.

**41.315 OUTDOOR RECREATION RESOURCES MANAGEMENT****3 semester hours**

Explores the array of contemporary issues involving land, leisure, and recreational planning.

**41.350 ADVANCED PLANNING****3 semester hours**

Presents the development of the skills and techniques used in analysis, goal setting, plan preparation, and implementation of urban and regional planning processes and activities.

**41.363 URBAN GEOGRAPHY****3 semester hours**

Provides a conceptual and methodological framework in which to view the process of urbanization.

**41.475 INDEPENDENT STUDY IN GEOGRAPHY****1-3 semester hours**

Provides independent, investigative research oriented to studies of specific geographical problems.

Prerequisite: Open to juniors and seniors majoring in geography.

**41.497 INTERNSHIP IN PLANNING****12 semester hours**

Involves the placement of a student who is enrolled in the course of study in urban/regional planning or environmental planning into a planning office for one semester, during which time the student will be actively involved in the functions and activities of that planning office.

**41.498 PLANNING SEMINAR****3 semester hours**

Provides an opportunity for reporting and analyzing experiences in internship. Integrates and utilizes practice in the development of land use from an urban or environmental perspective. Taken in coordination with the internship in urban/regional planning (41.497).

**Earth Science and Geology  
(Code 51)****51.100 FIELD APPLICATIONS OF EARTH SCIENCE****3 semester hours**

Open to QUEST summer program students only. Is not applicable toward a degree in earth science.

**51.101 PHYSICAL GEOLOGY****3 semester hours**

Studies the landscape in relation to the structure of the earth's crust; agents at work to change landforms; classification and interpretation of rocks. (1 credit optional lab; afternoon field trip is required.)

**51.102 HISTORICAL GEOLOGY****3 semester hours**

Examines the evolution of earth and life on earth as interpreted from rock and fossil evidence; particular emphasis placed on the geologic history of North America. (1 credit optional lab; afternoon field trip required.)

**51.105 ENVIRONMENTAL GEOLOGY****3 semester hours**

Application of geologic knowledge to environmental con-

cerns. Emphasizes mineral, energy, soil, and water resources along with earth processes that are hazardous to mankind. An afternoon field trip with a nominal fee is required.

### **51.111 PHYSICAL GEOLOGY LABORATORY**

**1 semester hour**

Presents an introduction to the practice of fundamental geology laboratory techniques including qualitative and quantitative analysis. Two hours laboratory per week. (It is recommended that it be taken concurrently with 51.101.)

### **51.112 HISTORICAL GEOLOGY LABORATORY**

**1 semester hour**

Provides an interpretation of earth history through the identification and evolution of the rock and fossil record and through the interpretation of geologic maps. Two laboratory hours per week. (It is recommended that it be taken concurrently with 51.102.)

### **51.173 INTRODUCTORY ENGINEERING GRAPHICS**

**1 semester hour**

An introduction to the fundamentals of standard graphic practices including the theory of multi-view and isometric projection, auxiliaries, sections, and standard dimensioning procedures. Two hours lecture/laboratory per week.

(Offered fall semester only.)

### **51.174 ENGINEERING DESIGN GRAPHICS**

**1 semester hour**

Applies concepts and techniques acquired in Introductory Engineering Graphics to solution and analysis of engineering problems and in engineering design. Required for all students enrolled in the pre-engineering program. Two hours lecture/laboratory per week.

(Offered spring semester only.)

### **51.255 METEOROLOGY**

**3 semester hours**

Studies the atmosphere via the use of gas laws and underlying principles of atmospheric change. The field trip component of this course may include additional student costs of approximately \$20 for air fare.

### **51.259 OCEANOGRAPHY**

**3 semester hours**

Provides an introduction to the geologic, chemical, and physical aspects of the ocean basins. Emphasizes ocean basin structure, topographic features, wave motion, current circulation, and methods of investigation. One weekend field trip is encouraged.

### **51.261 MINERALOGY**

**4 semester hours**

Reviews the origin, occurrence, and identifying characteristics of common minerals. Stresses both megascopic and microscopic techniques. Three hours class, 2 hours laboratory per week.

(Offered fall semester only.)

### **51.262 PETROLOGY**

**4 semester hours**

Presents megascopic and petrographic analysis and identification of rocks with emphasis on field occurrences and associations. Three hours class, 2 hours laboratory per week.

Prerequisite: 51.261

(Offered spring semester only.)

### **51.320 REMOTE SENSING OF THE EARTH**

**3 semester hours**

Will stress the use of remote sensing technology to explore for, monitor, and manage the earth's natural resources.

### **51.355 SYNOPTIC METEOROLOGY**

**3 semester hours**

Presents observation and analysis of data for understanding and predicting the complexities of the atmosphere.

Prerequisite: 51.255 or consent of instructor

### **51.360 INTRODUCTION TO PALEONTOLOGY**

**4 semester hours**

Introduces students to modern concepts and methods in paleobiology using examples from various groups of organisms important in the fossil record. Field trips are an integral component of course.

Prerequisite: 51.102 or 50.211 or consent of the instructor

### **51.365 GEOMORPHOLOGY**

**4 semester hours**

Study of the origin of landforms with emphasis on the geologic processes and structures that generate the landforms and applications of landform analysis. A two-day weekend field trip is required. Three hours class, 2 hours laboratory per week.

Prerequisite: 51.101 or consent of the instructor

(Offered fall semester only.)

### **51.369 STRUCTURAL GEOLOGY**

**4 semester hours**

Analyzes rock deformation based upon the principles of rock mechanics and the utilization of data from field investigations. Three hours class, 2 hours laboratory per week.

(Offered spring semester only.)

### **51.370 HYDROLOGY**

**3 semester hours**

Study of water movement upon and within the earth with emphasis on calculations used in flood forecasting, surface water supply, and groundwater supply. Two hours class, 2 hours laboratory per week.

(Offered every other spring only.)

### **51.451 FIELD TECHNIQUES IN EARTH SCIENCE**

**6 semester hours**

Provides intensive field and laboratory training in the use of equipment and techniques in geology, hydrology, and cartography. Field trips are integral, vital parts of the course.

Prerequisite: 15 credit hours in earth science courses or consent of the instructor

(Offered summers only.)

**51.453 PROGRAMMING AND OPERATION  
OF THE PLANETARIUM**

**3 semester hours**

Provides an intensive study in the methods of effective educational use of the planetarium as a teaching and motivational device as well as supervised training and practice in the operation, use, and maintenance of the planetarium equipment.

**51.461 MINERAL RESOURCES**

**3 semester hours**

Studies both metallic and nonmetallic mineral deposits. Emphasizes the origin of deposits, exploration, and exploitation methods used, and environmental problems encountered.

Prerequisite: Mineralogy, 51.261 or consent of the instructor

**51.462 FUNDAMENTALS OF PETROLEUM  
GEOLOGY**

**3 semester hours**

Presents an introduction to petroleum, its properties, origin, accumulation, exploration, and exploitation.

**51.468 STRATIGRAPHY AND SEDIMENTATION**

**4 semester hours**

Studies processes and agents which erode, transport, and deposit sediments and the geologic interpretation of the resulting rocks. Three hours class, 2 hours laboratory per week.

(Offered fall semester only.)

**51.470 GROUNDWATER HYDROLOGY**

**3 semester hours**

Covers groundwater flow theory, well hydraulics exploration techniques, development of groundwater supplies, and prevention or correction of groundwater pollution. One- or two-day field trip required. Two hours class, 2 hours laboratory per week.

(Offered every other spring only.)

**51.475 INDEPENDENT STUDY IN EARTH SCIENCE**

**1-3 semester hours**

Provides an opportunity for student research in various areas of earth science. Research is conducted under supervision of a faculty member.

Prerequisite: 21 semester hours in earth science.  
(See section on Preprofessional and Career Advisement.)

**51.493 BIBLIOGRAPHY AND RESEARCH**

**3 semester hours**

Provides for library and/or field research in geology.

Prerequisite: 51.261, 262, 468, or consent of instructor

**51.496 INTERNSHIP IN EARTH SCIENCE**

**3-15 semester hours**

Provides for a work-study program available only to juniors and seniors majoring in earth science. Not applicable toward major or minor in earth science.

**MARINE SCIENCE CONSORTIUM**

Courses in marine science are offered during the summer by the Marine Science Consortium. This is a joint program sponsored by several Pennsylvania state universities. The courses are acceptable for elective credit in majors in biology and earth science.

**COURSES CURRENTLY APPROVED**

**(Code 55)**

*For course descriptions and credit, see announcements of Marine Science Consortium.*

<b>55.110</b>	<b>INTRODUCTION TO OCEANOGRAPHY</b>
<b>55.211</b>	<b>FIELD METHODS</b>
<b>55.212</b>	<b>NAVIGATION</b>
<b>55.221</b>	<b>MARINE INVERTEBRATES</b>
<b>55.241</b>	<b>MARINE BIOLOGY</b>
<b>55.250</b>	<b>MANAGEMENT OF WETLAND WILDLIFE</b>
<b>55.260</b>	<b>MARINE ECOLOGY</b>
<b>55.270</b>	<b>SCUBA DIVING</b>
<b>55.280</b>	<b>FIELD BIOLOGY</b>
<b>55.331</b>	<b>CHEMICAL OCEANOGRAPHY</b>
<b>55.342</b>	<b>MARINE BOTANY</b>
<b>55.343</b>	<b>ICHTHYOLOGY</b>
<b>55.344</b>	<b>ANATOMY OF MARINE CHORDATES</b>
<b>55.345</b>	<b>ORNITHOLOGY</b>
<b>55.364</b>	<b>MARINE GEOLOGY</b>
<b>55.398</b>	<b>DEVELOPMENTAL BIOLOGY OF MARINE ORGANISMS</b>
<b>55.420</b>	<b>MARINE MICROPALAEONTOLOGY</b>
<b>55.431</b>	<b>ECOLOGY OF MARINE PLANKTON</b>
<b>55.458</b>	<b>EXPLORATION METHODS IN MARINE GEOLOGY</b>
<b>55.459</b>	<b>COASTAL GEOMORPHOLOGY</b>
<b>55.498</b>	<b>TOPICS IN MARINE SCIENCE</b>
<b>/598</b>	
<b>55.500</b>	<b>PROBLEMS IN MARINE SCIENCE</b>
<b>55.510</b>	<b>OCEANOGRAPHY I (In-Service Teachers)</b>
<b>55.511</b>	<b>OCEANOGRAPHY II (In-Service Teachers)</b>
<b>55.520</b>	<b>MARINE MICROBIOLOGY</b>
<b>55.530</b>	<b>COASTAL SEDIMENTATION</b>
<b>55.540</b>	<b>ENVIRONMENTAL SCIENCE EDUCATION</b>
<b>55.570</b>	<b>RESEARCH CRUISE - BIOLOGY, GEOLOGY, POLLUTION</b>

# **HEALTH, PHYSICAL EDUCATION, AND ATHLETICS**

## **Faculty**

Professors Jerry Medlock (chairperson), Roger Sanders, William J. Sproule; Associate Professors Charles Chronister, Ronald E. Puhl, Burton T. Reese, Henry C. Turberville Jr.; Assistant Professors Mary Gardner, Steve Goodwin, Susan Hibbs, Carl M. Hinkle, Sharon O'Keefe, Linda LeMura; Instructors Sheila Martucci, Tom Martucci, Carl Poff, David R. Rider

The Department of Health, Physical Education, and Athletics serves the student community by providing academic credit to fulfill the university's general education requirement. Credit is granted for participation in physical activities courses designed to be of lifelong benefit to the individual in the areas of fitness, recreation, and survival.

A new interdisciplinary bachelor's degree program is available in adult health; an area of concentration is provided in elementary education. The department cooperates in several career concentrations including community recreation leader and outdoor leadership and program administration.

Students over 29 years of age must have medical clearance before taking vigorous physical activity courses.

## **B.S. in Adult Health**

Requirements: 35-41 hours of interdisciplinary courses including 48.101; 45.211; 50.231, 173, 174, 230, 205; 05.298, 250, or 350; 28.292; 05.321, 411, 377, 477; and 93.344 or 50.282

Select one of 48.251, 311, 380, or 476

Select one of 05.430; 28.290; or 50.254

Internship: 45.496-Practicum in an adult or elderly setting.

A humanities minor in art, English, history, music, philosophy, theater, or a broad area cluster (24 credits) of selected courses at the 300 and 400 levels also is required.

## **COURSE DESCRIPTIONS**

### **Health, Physical Education, and Athletics (Code 05)**

#### **05.149 AQUATICS**

**1 semester hour**

For nonswimmers - provides an opportunity to make a proper physical and mental adjustment to water. Introduces basic skills as provided by the American Red Cross with specific emphasis on becoming safe in, on, or about a body of water.

#### **05.150 AQUATICS**

**1 semester hour**

Same content as 05.149 but adapted for beginning skills.

#### **05.151 INTERMEDIATE AQUATICS**

**1 semester hour**

Reviews basic skills; introduces advanced skills and swimming strokes with emphasis on form and efficiency, elementary rescue, and aquatic games.

#### **05.155 SWIMNASTICS**

**1 semester hour**

Assists students to attain and maintain physical fitness through water activities.

#### **05.160 HEALTH AND THE NATURE OF MAN**

**3 semester hours**

Survey of a variety of health topics including human sexuality, mental health, substance abuse, fitness, nutrition, cancer, death, and dying.

#### **05.200 CPR AND SAFETY**

**1 semester hour**

Designed for completion of Red Cross CPR certification and to develop a safety awareness expertise for accident prevention. Fee may be required.

#### **05.214 FENCING**

**1 semester hour**

#### **05.217 BICYCLING**

**1 semester hour**

An introductory course for novice cyclists who have access to a variable speed bicycle. Local touring is part of the course. Local bicycle rentals are available.

#### **05.219 TENNIS**

**1 semester hour**

A beginning course that teaches basic stroke execution, strategy, and court etiquette.

#### **05.222 CREATIVE DANCE**

**1 semester hour**

#### **05.224 FITNESS DANCE**

**1 semester hour**

Attempts to provide a method of cardiovascular endurance in a particular interest area.

#### **05.228 GYMNASTICS**

**1 semester hour**

#### **05.230 WEIGHT TRAINING AND FITNESS**

**1 semester hour**

Develops knowledge and skill in and appreciation of weight training and conditioning programs.

#### **05.231 ARCHERY**

**1 semester hour**

#### **05.232 BOWLING**

**1 semester hour**

Fee required.

<b>05.233</b>	<b>BADMINTON</b>	<b>1 semester hour</b>	<b>05.248</b>	<b>BASIC SAILING</b>	<b>1 semester hour</b>
<b>05.234</b>	<b>GOLF</b>	<b>1 semester hour</b>		A beginning course that includes terminology, maneuvering under normal and severe weather conditions, seamanship, boating, and safety. Swimming ability required.	
	An introductory course designed to develop basic skills. Rules, techniques, etiquette, and an emphasis on skill practice are stressed. Fee may be required.				
<b>05.235</b>	<b>RIFLERY</b>	<b>1 semester hour</b>	<b>05.249</b>	<b>SYNCHRONIZED SWIMMING</b>	<b>1 semester hour</b>
<b>05.236</b>	<b>VOLLEYBALL</b>	<b>1 semester hour</b>		Provides students with a basic background in the fundamentals skills, strokes, and movement progressions involved in developing a basic routine.	
<b>05.237</b>	<b>MODIFIED PHYSICAL EDUCATION</b>	<b>1 semester hour</b>	<b>05.250</b>	<b>ADVANCED LIFESAVING</b>	<b>2 semester hours</b>
	For approved students only.			Provides an opportunity to attain an American Red Cross Advanced Lifesaving Certificate.	
<b>05.238</b>	<b>RACQUETBALL-HANDBALL</b>	<b>1 semester hour</b>	<b>05.251</b>	<b>TECHNIQUES OF COACHING AND OFFICIATING BASEBALL</b>	<b>3 semester hours</b>
<b>05.239</b>	<b>SQUARE DANCE</b>	<b>1 semester hour</b>		Classroom-laboratory courses dealing with an overall view of baseball administration, organization, fundamental skills, drills, and techniques of umpiring.	
<b>05.240</b>	<b>SLIMNASTICS AND FITNESS</b>	<b>1 semester hour</b>	<b>05.252</b>	<b>TECHNIQUES OF COACHING AND OFFICIATING BASKETBALL</b>	<b>3 semester hours</b>
	Develops awareness and understanding of physical self and capabilities; teaches students how to improve their physical condition. Exercise and body mechanics are included.				
<b>05.241</b>	<b>JUDO SELF-DEFENSE</b>	<b>1 semester hour</b>	<b>05.253</b>	<b>TECHNIQUES OF COACHING AND OFFICIATING FOOTBALL</b>	<b>3 semester hours</b>
<b>05.242</b>	<b>PHYSIOLOGICAL AND MEDICAL ASPECTS OF ATHLETIC COACHING</b>	<b>3 semester hours</b>		Instruction in techniques of coaching, player-coach relationship, program organization and administration, and officiating.	
	Presents basic anatomical and physiological factors affecting movement, endurance, strength, and conditioning in sports; studies equipment, training, treatment of injuries, safety problems, and medical research relating to athletics.		<b>05.254</b>	<b>TECHNIQUES OF COACHING AND OFFICIATING FIELD HOCKEY</b>	<b>3 semester hours</b>
<b>05.243</b>	<b>BACKPACKING</b>	<b>1 semester hour</b>		Instruction in techniques of coaching and officiating all the phases of field hockey.	
<b>05.244</b>	<b>ORIENTEERING</b>	<b>1 semester hour</b>	<b>05.256</b>	<b>TECHNIQUES OF COACHING AND OFFICIATING CROSS COUNTRY, TRACK AND FIELD</b>	<b>3 semester hours</b>
<b>05.245</b>	<b>CANOEING</b>	<b>1 semester hour</b>		Analysis of technique and the development of personal skills. Knowledge provided for development of a sound track program. Rules, starting, officiating, scoring, and facility use will be discussed.	
<b>05.246</b>	<b>BEGINNING SKIN AND SCUBA DIVING</b>	<b>1 semester hour</b>	<b>05.257</b>	<b>TECHNIQUES OF COACHING AND OFFICIATING WRESTLING</b>	<b>3 semester hours</b>
<b>05.247</b>	<b>ROCK CLIMBING</b>	<b>1 semester hour</b>		This course is intended to give prospective coaches an insight into the problems and situations that may be encountered; it prepares the individual to teach as well as coach wrestling.	
	Provides actual rock climbing experiences for the beginning rock climbing enthusiast. Introduces basic knowledge, skills, and practical application of climbing. Serves as a foundation for further experiences in this area of recreation.				

<b>05.260</b>	<b>TECHNIQUES OF COACHING AND OFFICIATING SWIMMING</b>	<b>3 semester hours</b>
	Presents techniques of coaching, swimming, diving, and rule interpretations and duties of officials.	
<b>05.270</b>	<b>EXERCISE AND YOU</b>	<b>2 semester hours</b>
	Studies appropriate physiological functions, exercise physiology, mechanical implications, and fitness measurement. Reviews procedures and practical application through programmed exercise. (3 contact hours)	
<b>05.271</b>	<b>INTERMEDIATE ARCHERY</b>	<b>1 semester hour</b>
	Provides the opportunity for the student to develop shooting skills.	
<b>05.272</b>	<b>INTERMEDIATE BOWLING</b>	<b>1 semester hour</b>
	Attempts to develop advanced skill and knowledge of bowling. Fee required.	
<b>05.273</b>	<b>INTERMEDIATE GOLF</b>	<b>1 semester hour</b>
	Provides instruction in the techniques and strategy involved in improving the individual skills of the student. Fee may be required.	
<b>05.274</b>	<b>INTERMEDIATE TENNIS</b>	<b>1 semester hour</b>
	Attempts to improve the student's tennis skills.	
<b>05.275</b>	<b>INTERMEDIATE VOLLEYBALL</b>	<b>1 semester hour</b>
	Studies the development and history of volleyball. Attempts to improve fundamental skills, team play, and strategy through participation.	
<b>05.276</b>	<b>INTERMEDIATE JUDO</b>	<b>1 semester hour</b>
	Provides student's an opportunity to develop higher levels of skill competencies in judo.	
<b>05.290</b>	<b>SPECIAL TOPICS</b>	<b>1-3 semester hours</b>
	Topics in this course will be announced in the scheduling bulletin prior to each semester.	
<b>05.298</b>	<b>FITNESS AND WELLNESS</b>	<b>3 semester hour</b>
	Provides learners with the tools for lifelong healthful living. Personal health profiles, mental health, personal fitness programs, stress management, nutritional, and environmental health topics are explored. Successful completion of course fulfills one credit of the physical education requirement.	

<b>05.311</b>	<b>METHODS AND MATERIALS IN ELEMENTARY SCHOOL PHYSICAL EDUCATION</b>	<b>3 semester hours</b>
	Provides principles and procedures to meet the needs and interests of elementary-age children in the area of physical education.	
<b>05.320</b>	<b>HEALTH AND SAFETY IN THE ELEMENTARY SCHOOL</b>	<b>3 semester hours</b>
	Provides students with health knowledge and training in the areas of elementary school environment and health appraisal techniques for teaching elementary school health, the elementary school health program, and safety education in the elementary school.	
<b>05.321</b>	<b>FIRST AID SAFETY</b>	<b>3 semester hours</b>
	Designed for the person who needs training in first aid and safety. Red Cross standard, advanced, and cardiopulmonary resuscitation certifications may be obtained.	
<b>05.331</b>	<b>RECREATION EDUCATION</b>	<b>3 semester hours</b>
	Presents discussion of, and practice in, recreation activities used in school and playground situations. Emphasizes recreation planning, techniques of leadership, legal liability, and trends in recreation programming.	
<b>05.333</b>	<b>SCHOOL CAMPING AND OUTDOOR EDUCATION</b>	<b>3 semester hours</b>
	Acquaints students with the scope of organized camping and the acquisition of and practices in the basic skills required of individuals involved in camping and outdoor education training. Requires field experiences.	
<b>05.350</b>	<b>WATER SAFETY INSTRUCTOR</b>	<b>2 semester hours</b>
	Reviews the nine basic swimming strokes and advanced lifesaving skills with an opportunity to analyze stroke mechanics, teaching methods, and provisions. An American Red Cross Water Safety Instructor Certificate is awarded after satisfactory completion.	
	Prerequisite: A valid American Red Cross Advanced Lifesaving Certificate, 17 years of age prior to starting date of course, sound physical condition, and a Red Cross Swimmer's Certificate, or the ability to perform the swimmer course skills.	
<b>05.377</b>	<b>ADULT EXERCISE PROGRAMMING</b>	<b>3 semester hours</b>
	A concentrated study of adult physiological functions under stress and the adjustment and regulatory activities of the body during exercise; development of a working knowledge of assessments, motor characteristics, and physical performance.	

**05.411 ADAPTED PHYSICAL EDUCATION  
3 semester hours**

Reviews the study and practice in techniques used by teachers to recognize and meet problems of the handicapped.

**05.420 TECHNIQUES IN HEALTH AND PHYSICAL EDUCATION FOR SPECIAL EDUCATION TEACHERS  
3 semester hours**

Presents sound principles and procedures for meeting physical, emotional, and social needs of the mentally retarded.

**05.430 CURRENT ISSUES IN HEALTH EDUCATION  
3 semester hours**

Assesses major problems which concern communities today: drugs, sexually transmitted diseases, pollution, alcohol, and suicide.

**05.477 METHODS AND MATERIALS IN ADULT PHYSICAL EDUCATION  
3 semester hours**

This course emphasizes the academic and technical knowledge necessary to conduct health and fitness programs in public and private agencies. Students are prepared to assume leadership and management positions within the health and fitness industries.

## **HISTORY**

### **Faculty**

Professors Craig A. Newton, H. Benjamin Powell, Theodore Shanoski, Ralph Smiley, James R. Sperry (chairperson), George A. Turner; Associate Professors Richard G. Anderson, Arthur Lysiak, Anthony J. Sylvester; Assistant Professors John Spurlock, Vibert White; Instructor Kenneth Millen-Penn

### **B.A. in History**

**Requirements:** 30 semester hours of history courses with at least 15 semester credits in 300 or 400 level courses.

Five history courses: 112 - Origins of the Modern World, 113 - The Modern World, 121 - United States History: Colonial Period to 1877, 122 - United States History: 1877 to the Present, 398 - Research and Writing Skills (*It is strongly recommended that students take this course in research and writing in their junior year.*)

One course, 3 semester credits, from any one of the following regional history courses: 141 - The Modern Far East, 142 - Latin America, from European Colonization to the Present, 143 - Black Africa, 144 - Islamic and Hindu Worlds: Middle East, India, and Malaysia.

One course, 3 semester credits, from any of the following upper division courses in American history: 372 - Colonial America and the War of Independence, 379 - The New Nation: United States, 1800-1845, 383 - Shaping of Contemporary America, 1896-1941, 385 - Recent American History: 1941 to the Present.

One course, 3 semester credits, from any one of the following upper division courses in European history: 319 - Modern England: The First Industrial Empire, 320 - French Revolution and Napoleon, 327 - World War I and the Dictators, 328 - World War II and Its Aftermath, 452 - Soviet Russia.

Two courses, 6 semester credits, as elective from any of the 300- or 400-level history courses.

### **Minor in History**

Eighteen semester hours of history courses with at least 6 semester credits in 300- or 400-level courses.

Two courses, 6 semester hours, from any of the 100-level history courses. Two courses, 6 semester hours, from any of the 200- or 300-level history courses. One course, 3 semester hours, from any of the 300- or 400-level history courses. History 398, Research and Writing Skills.

The program for the history minor provides the student with the following features: at least one directed exercise in independent historical research (History 398); a minimal background in those courses at the 100-level that are basic to and required of history majors; flexibility in framing a minor pertinent to the student's academic interest; and at least one course in addition to History 398 at an advanced requirement level.

## **COURSE DESCRIPTIONS**

### **History (Code 42)**

Prerequisites are subject to modification by the instructor.

#### **42.100 TRANSATLANTIC WORLD IN THE 20TH CENTURY**

**3 semester hours**

Represents an analysis comparing and contrasting the experiences of Americans and Western Europeans since 1918. Focuses on the decay of Western traditions, the dilemma of the individual in an increasingly complex society, and the rise of "technocratic" civilization. Provides insight into roots of current events, promotes sense of historic awareness beyond the national level, and enhances appreciation of basic similarities and differences among Americans and Western Europeans.

#### **42.101 OUTLINE OF WORLD HISTORY**

**3 semester hours**

This is an introductory global study of the history of mankind through ancient, medieval, and modern eras to the present. The focus is on great historical movements in their political, social, economic, cultural, and technological dimensions. It is designed for students needing a general historical overview. Course enrollment and credit toward graduation are restricted to elementary education majors in the College of Professional Studies.

(Not offered every semester.)

#### **42.112 ORIGINS OF MODERN WORLD**

**3 semester hours**

Describes the political, economic, social, intellectual, military forces, and events that shaped the story of mankind from the early Renaissance to the early 19th century.

#### **42.113 THE MODERN WORLD**

**3 semester hours**

Reviews the political, economic, social, intellectual, and technological elements of 19th and 20th century history, showing the progress of the Western tradition and the growing importance of the non-Western world.

#### **42.121 UNITED STATES HISTORY SURVEY: COLONIAL PERIOD TO 1877**

**3 semester hours**

Presents a chronological history to 1877 with emphasis on foreign affairs and the evolution of political, economic, social, and cultural aspects.

#### **42.122 UNITED STATES HISTORY SURVEY: 1877 TO THE PRESENT**

**3 semester hours**

Presents political, social, cultural, intellectual, economic, and foreign affairs developments of the United States from reconstruction to the present.

#### **42.133 THE ANCIENT AND MEDIEVAL WORLDS**

**3 semester hours**

Course surveys from the Ancient Near East to the fall of the Roman Empire in the West, emphasizing Greece, Rome, and the rise of Christianity; a study of the people and countries of the West that emerged after the fall of the Roman Empire, with emphasis on feudalism, manorialism, and the medieval church.

(Not offered every semester.)

#### **42.141 THE MODERN FAR EAST**

**3 semester hours**

Course focuses on modern China and Japan and closely studies the value system of these peoples as reflected in their politics, arts, and communications in the 19th and 20th centuries. Particular attention paid to the interaction between the old models provided by Confucianism and Buddhism with the models provided by the West during modernization.

(Not offered every semester.)

#### **42.142 LATIN AMERICA: FROM EUROPEAN COLONIZATION TO THE PRESENT**

**3 semester hours**

Course is an introductory, concise survey of Latin American history from 1492 to the present, stressing the significant economic and social factors in its evolution.

(Not offered every semester.)

#### **42.143 BLACK AFRICA**

**3 semester hours**

Presents a survey of the transformation of the societies of Sub-Saharan Africa from colonialism to national independence.

#### **42.144 ISLAMIC AND HINDU WORLDS: MIDDLE EAST, INDIA, AND MALAYSIA**

**3 semester hours**

Introductory course that surveys the religious, cultural, economic, and political history of the Middle East, North Africa, the Indian subcontinent, the Malay Archipelago, and their bearing on contemporary Third World problems.

(Not offered every semester.)

#### **42.208 CONTEMPORARY ISSUES IN UNITED STATES HISTORY**

**3 semester hours**

Examines selected issues of social, political, or foreign affairs within a historical context, describing the origin, evolution, current significance, and importance in American society. The issues may vary each semester.

#### **42.210 VALUES IN CONFLICT IN 20TH CENTURY HISTORY**

**3 semester hours**

Select 20th century conflicts involving values of the individual and the civilization are presented and resolutions achieved are reviewed and evaluated. The selection of conflicts varies each semester.

**42.215 GLOBAL ISSUES IN HISTORY:  
A CONFLICT OF VALUES**

**3 semester hours**

Course introduces students to the historical and global nature of many of today's critical issues that have far reaching consequences. Population explosion, famine in the underdeveloped world, energy crisis, terrorism, and the spread of nuclear weapons are illustrative of some of the issues that will be examined. Attention will be given to defining values as related to these issues.

(Not offered every semester.)

**42.222 GROWTH OF BUSINESS IN AMERICA**

**3 semester hours**

Focuses on the evolution of business from 1776 to the present, major changes in the corporate management from 1850 to the present, and life in the managerial world in the post-1945 period.

**42.223 ECONOMIC HISTORY OF UNITED STATES**

**3 semester hours**

To understand the changing nature of the American economy, this course covers three time periods: the commercial-agricultural age, the industrial age, and the modern managerial age. Agriculture, banking, business administration, commerce, labor, manufacturing, mining and transportation, social and political factors that contributed to changing economic relationships in the United States are required.

**42.224 THE IMMIGRANT EXPERIENCE**

**3 semester hours**

Surveys immigration to the United States from colonial to present time, tracing the experience from conditions in native lands, through the transit to America, to settlement and attending problems during the earlier years in the new country. Occasional case studies illustrate the experience. The socio-historical framework of assimilation is used to describe separate eras of immigration.

(Not offered every semester.)

**42.226 POPULAR CULTURE IN AMERICA**

**3 semester hours**

Review of major forms of popular culture in America from colonial beginnings to the present, telescoped to permit fullest presentation of the period since 1920. Course blends continuity of values and ideas in American culture with dynamics of change to which the culture constantly adjusts.

(Not offered every semester.)

**42.227 THE AMERICAN WOMAN:  
ACCOMPLISHMENTS AND ASPIRATIONS**

**3 semester hours**

Identifies status, roles, and achievements of American women from colonial period to present. Examines historical events or trends which elevated or diminished women's roles in American society. Discusses the attitude of men towards women and their role so that the advancement of the latter will be perceived to result from the interaction of sexes which produced major turning points of women in American history.

(Not offered every semester.)

**42.229 MODERN WORLD LEADERS**

**3 semester hours**

Studies significant world leaders in religion, politics, war, and culture and their impact upon world history. Focuses on different leaders each time offered and covers a selected period from the Renaissance to the present. Analyzes the conditions which helped produce these leaders and ends by discussing reasons for their success or failure. Includes only leaders who have made a significant contribution outside their national boundaries.

**42.246 MODERN EUROPEAN THOUGHT  
AND SOCIETY**

**3 semester hours**

Relates changes in currents of thought during the period to political, economic, and social developments. Special attention given to interpretations of major intellectual movements.

(Not offered every semester.)

**42.250 HISTORY OF SCIENCE**

**3 semester hours**

The historical development of the sciences and the nature of scientific thought and method will be studied to provide insight and understanding of the characteristics of the sciences as well as their significance to human progress from antiquity to the present.

(Not offered every semester.)

**42.255 HEALTH ISSUES AND HEALTH  
PROFESSIONALS IN HISTORY**

**3 semester hours**

Delineates major issues and personalities in the rise of modern health care as well as ideas and attitudes prevalent in the histories of the health professions. Compares and contrasts American, Canadian, and Western European health services. Explains the relevance of cultural values for the theory and organization of health care.

(Not offered every semester.)

**42.260 SPORT AND SOCIETY IN AMERICA**

**3 semester hours**

Presents a cultural approach to organized sport in the U.S., which proceeds from the premise that sport mirrors the values, states of technology, and the conditions of society. Emphasizes the rise of the institution of sport and its impact on business, commercialism, leisure, affluence, urbanism, nationalism, and the problems of governance and law.

(Not offered every semester.)

**42.277 HISTORY OF CHRISTIAN RELIGION**

**3 semester hours**

Surveys the ancient, medieval, and modern roots of contemporary Christian denominations and movements and focuses upon key issues, personalities, and historical conditions in the development of Christian religion.

(Not offered every semester.)

**42.281 MILITARY HISTORY I****3 semester hours**

Studies organized warfare from its origins to the last campaign of Napoleon I, concentrating on strategy and tactics. Examines moral and social problems raised by warfare.

(Not offered every semester.)

**42.282 MILITARY HISTORY II****3 semester hours**

Studies organized warfare and the theory of war from the Napoleonic age to the present, concentrating on strategy and tactics. Examines the socio-political background, especially of the two world wars and the age of guerrilla warfare.

(Not offered every semester.)

**42.318 EARLY ENGLAND:****THE MAKING OF AN ISLAND STATE****3 semester hours**

Reviews political, economic, social, and cultural life in England to the Glorious Revolution.

(Not offered every semester.)

**42.319 MODERN ENGLAND:****THE FIRST INDUSTRIAL EMPIRE****3 semester hours**

Examines political, social, economic, and cultural development in England from the Glorious Revolution to the present with emphasis on the development of democracy, the Industrial Revolution, and the growth and decline of the British Empire.

(Not offered every semester.)

**42.320 FRENCH REVOLUTION AND NAPOLEON****3 semester hours**

Analyzes 1789-1815 era in France and assesses its significance for the history of France and the world.

Prerequisite: 42.112 or with the permission of the instructor.

(Not offered every semester.)

**42.324 REVOLUTIONARY EUROPE AND THE RISE OF MODERN TRADITIONS, 1600-1789****3 semester hours**

Discusses the rise of the modern state; the political, intellectual, social, economic, and cultural aspects of the eras of the Scientific Revolution and Enlightenment; the establishment of European world hegemony and a world economy; the diplomatic and military interaction of the European states.

(Not offered every semester.)

**42.326 EUROPE 1789-1914****3 semester hours**

Studies political and military events within their economic, social, intellectual, religious, and artistic settings from the French Revolution through the Industrial Revolution. Examines the unification of Italy and Germany to the diplomatic crises that led to the first world war.

(Not offered every semester.)

**42.327 WORLD WAR I AND THE DICTATORS****3 semester hours**

Origins of World War I and alliance systems that fought it, diplomacy and military strategy and tactics of the war and the peace treaties of 1918-1920. Rise of Mussolini, Stalin, Hitler, and the lesser dictators along with the international crises that finally culminated in the outbreak of World War II. Course stresses ideological and global patterns of which European events formed a part.

(Not offered every semester.)

**42.328 WORLD WAR II AND ITS AFTERMATH****3 semester hours**

Surveys European powers in the late 1930s with emphasis on the forces leading to war; military and diplomatic developments of World War II and the causes of the East-West rift; the reconstruction of democratic Europe and formation of the Soviet block; European integration and political trends in both power systems.

(Not offered every semester.)

**42.347 HISTORY OF THE HOLOCAUST****3 semester hours**

Focuses upon the major theme—the genesis and implementation of the planned destruction of European Jewry from 1933 to 1945, after briefly tracing the history of anti-Semitism and evaluating scope of prejudice, discrimination and genocide in contemporary civilization. Includes an analysis of literature of the Holocaust and evaluation of the Holocaust's impact on modern day Israel and world Jewish community.

(Not offered every semester.)

**42.356 RUSSIA TO THE BOLSHEVIK REVOLUTION****3 semester hours**

Provides a survey of Russia from the beginnings of the Russian State in the 9th century through Kievan, Muscovite, and Imperial periods to the Bolshevik Revolution of 1917.

(Not offered every semester.)

**42.372 COLONIAL AMERICA AND THE WAR OF INDEPENDENCE****3 semester hours**

Reviews European colonization in North America with major attention to the establishment and development of England's colonies, an emerging American society, and problems which created conflict between the Americans and the British—resulting in the American War of Independence.

(Not offered every semester.)

**42.379 THE NEW NATION:****UNITED STATES, 1800-1845****3 semester hours**

American life changed dramatically as the nation began its experiment with democracy. Course reviews the impact of the democratic experiment on government, the economy, our culture, and society. Among subjects studied are political parties, railroads, popular music, and anti-slavery.

(Not offered every semester.)

**42.383 SHAPING OF CONTEMPORARY AMERICA,  
1896-1941**

**3 semester hours**

During these years, the United States underwent major changes: imperialistic adventures, reluctant but expectant involvement in World War I, the "flaming twenties," and the nation's greatest depression. Out of these emerges the modern mass-centered welfare state.

(Not offered every semester.)

**42.385 RECENT AMERICAN HISTORY:  
1941 TO THE PRESENT**

**3 semester hours**

This course is an examination of the major political, economic, social-cultural and intellectual developments in the United States from 1941 to the present. Cold War, Korea, and Vietnam, turmoil of the 1960s, nuclear concerns, and the role of the individual in an increasingly complex, technological society are some of the major themes examined.

(Not offered every semester.)

**42.388 PENNSYLVANIA**

**3 semester hours**

Examines major contributions of Pennsylvania to national life, relations between state and national movement.

(Not offered every semester.)

**42.391 DIPLOMATIC HISTORY OF THE UNITED  
STATES TO 1898**

**3 semester hours**

Presents a critical analysis of United States foreign relations from the colonial period to the 1898 war with Spain.  
(Not offered every semester.)

**42.392 DIPLOMATIC HISTORY OF THE UNITED  
STATES SINCE 1898**

**3 semester hours**

Presents a critical analysis of United States foreign relations from the war with Spain in 1898 to the present.  
(Not offered every semester.)

**42.397 INDEPENDENT STUDY IN HISTORY**

**1-4 semester hours**

The topic selected must be approved by a committee appointed by the chairperson. Independent reading and/or research related to some aspect of history is supervised by an appropriate member of the department. A student may register for this course no more than twice, and credits may not exceed 4 semester hours.

Prerequisite: 60 semester hours college credit  
(See section on Preprofessional and Career Advisement.)

**42.398 RESEARCH AND WRITING SKILLS**

**3 semester hours**

Focuses on the mechanics and processes of research and on the development of creativity and writing style through composition of a brief formal paper.

**42.452 SOVIET RUSSIA**

**3 semester hours**

Presents a critical analysis of the political, social, economic, and cultural evolution of the Soviet Union and a study of Soviet foreign policy.

Prerequisite: 42.113  
(Not offered every semester.)

**45.453 PROBLEMS OF CONTEMPORARY  
LATIN AMERICA**

**3 semester hours**

Analyzes recent events or movements that may indicate recurrence of historical problems or major developments of international significance in selected countries of Latin America.

Prerequisite: 3 semester hours in history  
(Not offered every semester.)

**42.472 HISTORY OF LABOR IN THE UNITED  
STATES**

**3 semester hours**

Surveys the emergence and development of organized labor from the post-Civil War period to the present. A third of the course is devoted to an analysis of contemporary labor-management problems and labor's changing role in our increasingly technological society.

Prerequisite: 3 semester hours in history

**42.497 INTERNSHIP IN HISTORY**

**3-12 semester hours**

Provides a work-study experience jointly administered by an academic faculty member and a sponsoring employer, with approximately 40 hours of supervised work generating each semester credit hour. Considered a "bridge" between the classroom and the professional world.

Prerequisite: For history majors, 15 semester hours of history including 42.398. Other majors may enroll if they receive the consent of their faculty advisers.

Note: A student may not apply more than 3 semester hours of internship toward the fulfillment of the history major, although he or she may enroll for more than 3 credits of 42.497.

# INTERDISCIPLINARY STUDIES

*Associate Dean, College of Arts and Sciences*

Interdisciplinary courses listed in this section are planned and often staffed by members of more than one department. These courses cover content that spans two or more academic disciplines.

## **Broad Area Programs for Bachelor of Arts and Bachelor of Science**

These programs offer opportunities for the student to follow a less conventional curriculum according to his or her preference. The student fulfills the 54 semester hours of general education requirements and then chooses to complete the prescribed core courses in the humanities, the social sciences, or the nature sciences and mathematics. He or she completes a total of 48 semester hours in the area of his or her core curriculum, with free electives sufficient to meet the 128 semester hour requirement for graduation. Students interested in a Broad Area Program should meet the associate dean of arts and sciences.

### **Requirements for the Broad Area Program in the Humanities :**

English 363 Shakespeare	3 semester hours
English 302 Advanced Composition	3 semester hours
Speech 208 Introduction to Theater Arts	3 semester hours
Speech 321 Argumentation	3 semester hours
Philosophy 211 Introduction to Philosophy	3 semester hours
Philosophy 212 Logic	3 semester hours
Art history elective	3 semester hours
Music history elective	3 semester hours
History: any two 3-hour courses	6 semester hours
Languages and Cultures Option: Choose from	3 semester hours
•1 semester of intermediate foreign languages	
•1 semester of foreign literature course (in original or translation)	
•1 semester of foreign culture and civilization	

<b>Total Core</b>	<b>33 semester hours</b>
Humanities electives	<u>15 semester hours</u>
<b>Total Broad Area Humanities Requirements</b>	<b>48 semester hours</b>

### **Requirements for the Broad Area Program in the Social Sciences :**

Economics 211-212 Principles of Geography 101 and 102 World	6 semester hours
Physical and World Cultural Geography	
Political Science 101 Elements of Political Science 161 U.S. Government	6 semester hours
Sociology 211 Principles of Sociology and 1 sociology elective	6 semester hours
Anthropology 101 Introduction to Anthropology or 200 Principles of Cultural Anthropology	3 semester hours
Psychology 101 General Psychology and 1 psychology elective	6 semester hours
<b>Total Core</b>	<b>33 semester hours</b>
Social Science electives	<u>15 semester hours</u>
<b>Total Broad Area Social Science Requirements</b>	<b>48 semester hours</b>

### **Requirements for the Broad Area Program in Natural Sciences/Mathematics :**

* Mathematics 125-126 (Analysis I-II)	6 semester hours
Mathematics 175 Introduction to Computer Science	3 semester hours
** Physics 211-212 General Physics	8 semester hours
Biology 110 General Zoology	4 semester hours
Biology 120 General Botany	4 semester hours
*** Chemistry 111 and 112	6 semester hours
General Chemistry I and II	
Chemistry 113 Chemistry Lab.	2 semester hours
Earth Science 101 and 111 Physical Geology	4 semester hours
Earth Science 102 and 112 Historical Geology	4 semester hours

<b>Total Core</b>	<b>38-41 semester hours</b>
Approved electives to complete Broad Area Requirements****	<u>9-11 semester hours</u>
<b>Total Broad Area Natural Science/Mathematics Requirements</b>	<b>50 semester hours</b>

\* Subject to the discretion of the mathematics and computer science department and the adviser, student will take Math 113 and Pre-Calculus before Math 125.

\*\* Or Physics 111 and 112 Introductory Physics I and II, subject to the discretion of the course instructor and the adviser, considering that Physics 211 and 212 have prerequisite (or concurrent) Analysis I and II, respectively, and are requirements for certain advanced courses in physics and chemistry.

\*\*\* Or Chemistry 108 University Chemistry (3 semester hours)

\*\*\*\* Electives within the broad area requirements are to be chosen from a list compiled by the mathematics and natural science departments and in possession of the adviser for the students in this program.

## **COURSE DESCRIPTIONS**

### **Interdisciplinary Studies (Code 09)**

#### **09.111 INTRODUCTION TO THE PEOPLES OF THE THIRD WORLD**

**3 semester hours**

Examines the peoples of the Far and Middle East, Africa, and Latin America; their art, literature, philosophy, cultural geography, and history, sketching their importance in the world.

#### **09.200 AN INTERDISCIPLINARY APPROACH TO AQUATIC ENVIRONMENT**

**3 semester hours**

The disciplines of chemistry, biology, earth science, and mathematics will be integrated to study aquatic environments. Special emphasis will be given to field and laboratory work in aquatic entomology and environmental chemistry.

#### **09.211 HISTORY OF NATURAL SCIENTIFIC THOUGHT**

**3 semester hours**

Reviews the historical development of the natural sciences and mathematics, the nature of scientific and mathematical thought and methods, the characteristics of these disciplines and their significance to human progress.

#### **09.213 SCIENCE, TECHNOLOGY, AND HUMAN VALUES**

**3 semester hours**

Compares the interaction of science and technology with human values. Studies representative past, present, and future technological developments and their impact on personal and social values.

#### **09.231 TECHNICAL WRITING**

**3 semester hours**

Presents the principles of technical writing in the physical, natural, and social sciences and in technology and industry. Promotes effectiveness in communicating technical information to both specialized and general audiences. Utilizes seminar approach involving class participation and individualized instruction.

#### **09.250 FRENCH HISTORY AND CULTURE I**

**3 semester hours**

Emphasizes the social, cultural, economic, and political contributions of France to the shaping of Western civilization from its Gallo-Roman beginnings to the present.

#### **09.251 FRENCH HISTORY AND CULTURE II**

**3 semester hours**

Discusses the transformation of France from the old regime into a modern nation; the interaction between social, cultural, economic, and political life in France and its importance in Western civilization.

#### **09.311 SEMINAR IN AMERICAN STUDIES, PART I**

**3 semester hours**

Designed to give the student a thorough appreciation of our varied heritage and research materials and resources available for deepening the knowledge of this growing area of inquiry. To be required of all majors in proposed baccalaureate program in American studies, but open to all juniors in the Arts and Sciences College.

#### **09.312 SEMINAR IN AMERICAN STUDIES, PART II**

**3 semester hours**

Continues the endeavor to convey a thorough appreciation of the varied American heritage and the research materials and resources available for deepening the knowledge of this growing area of inquiry. To be required for all junior-level majors in the baccalaureate program in American Studies.

#### **09.401 HISTORY AND POLITICS OF USSR**

**3 semester hours**

Combines the study of the history of the USSR with the approaches of political science. Primarily offered in the summer. Involves students in a tour of areas of the USSR.

#### **09.431 SOCIALISM: THEORY AND HISTORY**

**3 semester hours**

Provides a historical and theoretical study of the socialist idea and its various attempted realizations from biblical times to the present.

#### **09.491 HONORS INDEPENDENT STUDY IN THE HUMANITIES I**

**1-3 semester hours**

An independent study course in which, under the guidance of his or her faculty mentor, the student will do the initial project(s) appropriate to the first stage of his or her proposed honors work.

#### **09.492 HONORS SEMINAR IN THE HUMANITIES**

**3 semester hours**

The honors seminar is the second of three steps in the Arts and Sciences Honors Program. This course will allow for continued in-depth study of a particular research project of the student's choice while also providing honor students the opportunity to discuss with their peers and interested faculty concepts in the humanities which relate to the research project and to the student's major field. Seminars will be organized around general themes selected by the humanities honors committee and will be announced in advance.

#### **09.493 HONORS INDEPENDENT STUDY IN THE HUMANITIES II**

**1-3 semester hours**

Final course in the Arts and Sciences Honors Program, humanities sequence. Independent study in an area previously approved as part of the student's overall honors program.

**09.495 HONORS SEMINAR IN THE NATURAL SCIENCES AND MATHEMATICS****1 semester hour**

Offers a cross-disciplinary perspective to students in the honors program with an emphasis on student presentation and discussion of important topics in a student's area of expertise.

**09.496 HONORS INDEPENDENT STUDY IN THE SOCIAL SCIENCES I****1-3 semester hours**

This independent study course is the first of three steps in the Arts and Sciences Honors Program. It involves the student's selection of an honors adviser and project, the initial exploratory reading, and proposal for a major Honors Independent Study Project. Honors Independent Study is similar to current independent study programs but is reserved specially for those who qualify for and wish to pursue an honors course of study in their last two years. Course is normally taken in the first or second semester of junior year.

**09.497 HONORS SEMINAR IN THE SOCIAL SCIENCES****3 semester hours**

The honors seminar is the second of three steps in the Honors Program. Course allows for continued in-depth study of a particular research project while allowing honor students the opportunity to discuss with their peers and interested faculty concepts in the social sciences which relate to the research project and the student's major field. Focus of the seminar is interdisciplinary.

**09.498 HONORS INDEPENDENT STUDY IN THE SCIENCES****3 semester hours**

Provides for an on-site work experience and training program designed to give selected interns an opportunity to apply theoretical and descriptive knowledge acquired in multiple humanities disciplines to the operations of the work setting. Must have approval of the university internship coordinator and dean of Arts and Sciences.

**47.498 SOCIAL SCIENCES INTERNSHIP****1-9 semester hours**

Provides for an on-site work experience and training program designed to give selected interns an opportunity to apply the theoretical and descriptive knowledge acquired in multiple social sciences disciplines to operations of the work setting. Must have approval of the university internship coordinator and dean of Arts and Sciences.

**59.498 NATURAL SCIENCES AND MATHEMATICS INTERNSHIP****1-9 semester hours**

Provides for on-site work experience and training program designed to give selected intern an opportunity to apply the theoretical and descriptive knowledge acquired in multiple natural sciences and mathematics disciplines to operations of the work setting. Requires approval of the internship coordinator and dean of arts and sciences.

**LANGUAGES AND CULTURES****Faculty**

Professors Ariane Foureman, Allen F. Murphy; Associate Professors Blaise C. Delnis, Brigitte L. Callay (chairperson); Assistant Professors Alejandro Bernal, Gilbert Darbouze, Patricia Dorame, Jorge A. Topete

**Note:** The Department of Languages and Cultures is revising its curriculum. For information on changes, contact the department chairperson.

**Placement**

Students who have studied a language elsewhere should consult the department chairperson for appropriate placement. Generally, the student should schedule courses as follows:

- With no previous study, schedule special sections of FL 101 for beginners, if schedule allows.
- With one year of high school or equivalent, schedule FL 101;
- With two years of high school, or equivalent, schedule FL 102;
- With three years of high school, or equivalent, schedule FL 103;
- With four years of high school, or equivalent, schedule FL 104.

**Individual Oral Practice**

Drill tapes for elementary and intermediate language courses are available for individual practice sessions in the new language laboratory located in Old Science Hall.

**Programs Abroad**

All language students are urged to seek opportunities to study abroad. An exchange and internship program with the University of Nancy's Faculte des Lettres and the Commercial Institute in Nancy, France, brings French students to Bloomsburg University. It affords Bloomsburg University students in French, regardless of their major, to study at Nancy. French majors and/or business majors with a strong concentration in French, are especially encouraged to take part in this program.

On occasion, the department organizes a summer study-tour in France in conjunction with the Department of Art.

In addition, students are encouraged to participate in accredited programs sponsored by other SSHE institutions and by other colleges and universities.

The department chairperson should be consulted regarding study abroad plans.

**Majors and Minors in French and Spanish**

**Note:** These requirements are in the process of revision. Inquire about changes.

Majors are offered in French and Spanish. A major for a

B.A. requires a minimum of 36 semester hours in language courses beginning with 103. Students exempt from required courses, take additional advanced electives as substitutes.

A minor is available in French and Spanish. Students should consult the chairperson.

It is recommended that students who major and/or minor in French or Spanish also elect courses in related fields such as a second foreign language, English, fine arts, history, philosophy, sociology, speech, and theater.

## Secondary Education

Requirements for a major leading to the B.S. in education are found in the section on Secondary Education under the College of Professional Studies.

## Early Childhood and Elementary Education Areas of Concentration

Students in elementary and early childhood education may elect an area of concentration in French, German, or Spanish. Students should consult their advisers in the Department of Languages and Cultures concerning particular courses to take. It is recommended that courses in culture and civilization, oral expression, literature, and phonetics be taken to complete the area of concentration. Courses 101 and 102 also may be counted within the required 18 semester hours.

## Language Awards

*Outstanding Academic Achievement*—awarded to any graduating senior who:

- a) has a minimum of 3.8 average in all courses in the major. A student majoring in French and Spanish may be considered for an award in each language;
- b) has a cumulative average in all work at the university of no less than 3.5;
- c) is recommended by the majority of the faculty of the major language.

*Certificate of Language Proficiency*—awarded to a student minoring in a language who has received no less than 3.5 average in all courses in the minor.

*Chairperson's Award*—awarded to a senior French and/or Spanish major who:

- a) has completed at least 21 credits in the language;
- b) excels in the language;
- c) has rendered language-related service to the Department and the university;
- d) is recommended by the majority of the faculty of the major language.

## COURSE DESCRIPTIONS

### French (Code 10)

#### B.A. in French

Note: Requirements are being revised.

**Required Courses:** French 10, 201, 202, 203, 204, 205, 211 or 212, 402, 422, English 20.311 or 411

**Electives:** 9 semester hours to be selected from culture and civilization, language, or literature

#### 10.101 FRENCH I

**3 semester hours**

Seeks to develop the four language skills and acquaint students with elements of Francophone culture. For students with no more than two years of study in French. Practice in language laboratory required.

#### 10.102 FRENCH II

**3 semester hours**

Continuation of 10.101.

Prerequisite: 10.101 or equivalent

#### 10.201 STRUCTURE OF THE FRENCH LANGUAGE

**3 semester hours**

Presents a topical review of syntax and use of idioms through applied exercises.

Prerequisite: 10.204 or equivalent  
(Offered fall semester only.)

#### 10.202 ORAL EXPRESSION I

**3 semester hours**

Presents prepared and free speaking activities about everyday life in francophone countries.

Prerequisite: 10.204 or equivalent, or concurrently with 204 with consent of the chairperson  
(Not offered every semester.)

#### 10.203 FRENCH III

**3 semester hours**

Continuation of development of the four language skills. Emphasis on reading. Study of Francophone culture.

Prerequisite: 10.102 or equivalent

#### 10.204 FRENCH IV

**3 semester hours**

Continuation of French 10.203. Emphasis on culture and communication.

Prerequisite: 10.203 or equivalent

#### 10.205 APPLIED PHONETICS AND PRONUNCIATION

**3 semester hours**

Analyzes French sound system through drills on pronunciation and intonation. Selections of prose, poetry, and songs for imitation.

Prerequisite: 10.102 or equivalent  
(Not offered every semester.)

<p><b>10.211 FOUNDATIONS OF FRENCH CULTURE AND CIVILIZATION</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Reviews major developments of French culture from an historical point of view. Course taught in English; knowledge of French unnecessary. Special projects for French majors.</p> <p>(Offered fall semester only.)</p>	<p><b>10.409 COMMERCIAL FRENCH II</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Studies French business life, aiming at preparing students for internships in a business firm in France, Quebec, or in a branch of a French company in the U.S. Business correspondence also reviewed.</p> <p>Prerequisite: 10.205 (Not offered every semester.)</p>
<p><b>10.212 FRANCE TODAY</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Presents major aspects of life in France today. Course taught in English; knowledge of French unnecessary. Special projects for French majors.</p> <p>(Not offered every semester.)</p>	<p><b>10.422 MASTERPIECES OF FRENCH LITERATURE</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Studies the most significant writers and playwrights of France.</p> <p>Prerequisite: 10.201 (Not offered every semester.)</p>
<p><b>10.281 SPECIAL TOPICS</b></p> <p style="text-align: right;"><b>/289 1-3 semester hours</b></p> <p>Provides knowledge and training in fields usually not covered in regular courses. Content determined by instructor and varies each time course is offered. Possible topics include French for travelers, French gastronomy, Quebec culture.</p> <p>(Not offered every semester.)</p>	<p><b>10.423 BLACK FRANCOPHONE WRITERS AND CULTURE</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Presents major aspects of life in Black Francophone countries and major writers in those countries. Course taught in French.</p> <p>Prerequisite: 10.204</p>
<p><b>10.295 ART AND CULTURE OF FRANCE</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Provides a study-tour of France with attention to French art as seen in relation to its social and cultural environment. Visits to places of artistic and cultural interest in and around Paris and the provinces.</p> <p>Prerequisite: Consent of the instructor</p>	<p><b>10.490 INDEPENDENT STUDY IN FRENCH</b></p> <p style="text-align: right;"><b>1-9 semester hours</b></p> <p>Provides for individual study of a particular aspect of French civilization, language, or literature under the supervision of a faculty member.</p> <p>Prerequisite: Consent of the instructor and the approval of the chairperson</p>
<p><b>10.325 FRENCH FOR ELEMENTARY SCHOOL</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Methods and materials for teaching French in elementary school including appropriate vocabulary, structures and cultural items.</p> <p>Prerequisite: 10.204 or equivalent</p>	<p><b>German</b> (Code 11)</p> <p><b>Note:</b> The curriculum is under revision. A minors proposal is under consideration. Inquire for further information.</p>
<p><b>10.331 SELECTED MODERN WRITERS</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Students study French for reading knowledge; selected modern works.</p> <p>Prerequisite: 10.204 or equivalent (Offered fall semester only.)</p>	<p><b>11.101 GERMAN I</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Designed to develop the four language skills and to acquaint students with elements of German speaking cultures. For students with no more than two years of study in German. Practice in language laboratory required.</p>
<p><b>10.401 ADVANCED FRENCH LANGUAGE</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Presents a thorough review of phonology, morphology, syntax, and semantics.</p> <p>Prerequisite: 10.301 or approval of chairperson (Not offered every semester.)</p>	<p><b>11.102 GERMAN II</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Continuation of 11.101. Reading and writing given additional emphasis.</p> <p>Prerequisite: 11.101 or equivalent</p>
<p><b>10.402 CONTEMPORARY ISSUES IN FRANCOPHONE MEDIA</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Presents further development of language fluency through discussion of current topics and issues selected from franco-phone newspapers and magazines.</p> <p>Prerequisite: 10.202 or equivalent (Not offered every semester.)</p>	<p><b>11.103 GERMAN III</b></p> <p style="text-align: right;"><b>3 semester hours</b></p> <p>Development of the four language skills. Basic grammar reviewed and new grammatical concepts presented. Reading and study of the culture given additional emphasis.</p> <p>Prerequisite: 11.102 or equivalent (Not offered every semester.)</p>

**11.104 GERMAN IV****3 semester hours**

Continuation of 11.103. Course emphasizes culture and communication.

Prerequisite: 11.103 or equivalent  
(Not offered every semester.)

**11.121 GERMAN AUTHORS OF THE 20TH CENTURY I****3 semester hours**

Examines works of major German authors such as Hesse, Brecht, Mann, Kafka, Durenmatt, and Boll. Course taught in English; knowledge of German unnecessary.

(Not offered every semester.)

**11.122 GERMAN AUTHORS OF THE 20TH CENTURY II****3 semester hours**

Continuation of 11.121. Course taught in English; knowledge of German unnecessary.

(Not offered every semester.)

**11.201 GRAMMAR AND COMPOSITION****3 semester hours**

In-depth study of German grammar. Stresses application of grammatical principles in controlled and free written composition.

Prerequisite: 11.104 or equivalent  
(Not offered every semester.)

**11.202 CONVERSATION****3 semester hours**

Emphasizes student participation in prepared and free-speaking activities on daily life in German speaking cultures. Outside readings and oral reports assigned. Grammar reviewed when necessary.

Prerequisite: 11.104 or equivalent or concurrently with 104 with consent of the chairperson  
(Not offered every semester.)

**11.204 GERMAN STUDIES ABROAD****1-6 semester hours**

Prerequisite: Minimum two semesters of German

**11.211 GERMAN CULTURE AND CIVILIZATION I****3 semester hours**

Provides an understanding of the geography, government, customs, education, arts, and history of the German-speaking countries, as well as a vivid sense of the current scenes in these countries. Course taught in English; knowledge of German not required.

(Not offered every semester.)

**11.212 GERMAN CULTURE AND CIVILIZATION II****3 semester hours**

Continuation of 11.211. Course taught in English; knowledge of German not required.

(Not offered every semester.)

**11.403 WORKSHOP****3 semester hours**

Presents selected materials for practical use. Recommended for majors in secondary education program.

Prerequisite: 11.201 or 202.  
(Offered upon demand only.)

**11.490 INDEPENDENT STUDY IN GERMAN****1-9 semester hours**

Provides for individual study of a particular aspect of German civilization, language, or literature under supervision of a faculty member.

Prerequisite: Consent of the instructor and approval of the chairperson

**Spanish**  
**(Code 12)**

**B.A. in Spanish**

**Note:** The Spanish curriculum is under revision. Inquire for further information.

**Required Courses:** Spanish 12.203, 204, 205, 211 or 212, 306, 307, 331, 402 (109 for teaching certificate majors), 430, English 20.311 or 411

**Electives:** 9 semester hours to be selected among the 300-and/or 400-level courses.

**12.101 SPANISH I****3 semester hours**

Develops the four language skills; acquaints students with elements of Hispanic culture. For students with no more than two years of Spanish. Practice in language laboratory required.

**12.102 SPANISH II****3 semester hours**

Continuation of 12.101. Reading and writing given additional emphasis.

Prerequisite: 12.101 or equivalent

**12.203 SPANISH III****3 semester hours**

Emphasizes use of language; reviews grammar as necessary.

Prerequisite: 12.102 or equivalent

**12.204 SPANISH IV****3 semester hours**

Continuation of 12.203

Prerequisite: 12.203 or equivalent

**12.205 PHONETICS: THEORY AND PRACTICE****3 semester hours**

Seeks to improve the student's ability to communicate effectively in spoken Spanish. Provides a detailed study of Spanish sound and intonation patterns through group and individual practice. Attends to individual pronunciation problems.

Prerequisite: 12.102 or equivalent  
(Not offered every semester.)

**12.206 CONVERSATION FOR HEALTH PROFESSIONALS****3 semester hours**

Seeks to acquaint students with Spanish so that they will be able to communicate with Spanish-speaking patients in health care settings. For students enrolled in health services.

Prerequisite: 12.204 or equivalent  
(Not offered every semester.)

**12.211 SPANISH CULTURE AND CIVILIZATION****3 semester hours**

Provides an understanding of Spain through geography, education, customs, fine arts, and history. Course taught in English; knowledge of Spanish not required. Special projects for Spanish majors.

(Offered fall semester only.)

**12.212 SPANISH AMERICAN CULTURE AND CIVILIZATION****3 semester hours**

Provides an understanding and appreciation of the present and past life of the Spanish-American Republics. Studies Aztec, Maya, and Inca cultures using films and outside readings. Course taught in English; knowledge of Spanish language not required. Special projects for Spanish majors.

(Offered spring semester only.)

**12.214 THE HISPANIC WORLD TODAY****3 semester hours**

Provides an understanding and appreciation of the present Spanish-speaking world, in both Spain, Spanish-American countries, and Spanish-speaking groups in the U.S. through geography, history, economics, politics, education, customs, and fine arts. Course taught in Spanish for Spanish majors and other interested people.

Prerequisite: 12.204 or consent of the instructor

**12.306 STRUCTURE AND COMPOSITION****3 semester hours**

Studies grammar and syntax and use of idioms through applied exercises.

Prerequisite: 12.204 or equivalent  
(Not offered every semester.)

**12.307 HISPANIC DAILY LIFE AND CUSTOMS****3 semester hours**

Emphasizes student participation in prepared and free speaking activities. Requires outside readings and oral reports.

Prerequisite: 12.204 or equivalent or concurrently with 204 with consent of the chairperson.  
(Not offered every semester.)

**12.308 SPANISH STUDIES ABROAD****1-6 semester hours**

Prerequisite: Minimum two years of Spanish

**12.309 COMMERCIAL SPANISH****3 semester hours**

Acquaints students with basic skills in Spanish trade correspondence and commercial reading. Emphasizes vocabulary and commercial idioms. Stresses elementary knowledge of commercial life and methods. For business students and others who desire to enhance their knowledge of Spanish.

Prerequisite: 12.204 or equivalent proficiency  
(Not offered every semester.)

**12.325 SPANISH FOR ELEMENTARY SCHOOL****3 semester hours**

Methods and materials for teaching Spanish in elementary school including appropriate vocabulary, structures and cultural items.

Prerequisite: 12.204 or equivalent

**12.331 SELECTED 20th CENTURY WRITERS****3 semester hours**

Reading and discussion of selected modern works.

Prerequisite: 12.307 or equivalent proficiency

**12.402 ISSUES IN THE HISPANIC MEDIA****3 semester hours**

Provides for further development of language fluency through discussion of a variety of topics and current issues in Hispanic media. Activities requiring the use of the spoken language. Student participation emphasized.

Prerequisite: 12.307 or equivalent proficiency  
(Not offered every semester.)

**12.421 HISPANIC PROSE****3 semester hours**

Studies outstanding authors from the beginning of Spanish literature to present day.

Prerequisite: 12.307 or equivalent proficiency  
(Not offered every semester.)

**12.422 HISPANIC THEATER AND POETRY****3 semester hours**

Studies outstanding authors from Pre-Columbian times to present day.

Prerequisite: 12.307 or equivalent proficiency  
(Not offered every semester.)

**12.430 SHORT STORY****3 semester hours**

Acquaints students with the short story as an expression of culture by Spanish, Spanish American, Chicano, and Puerto Rican authors and sensitizes students to cultural values in the Hispanic world.

Prerequisite: 12.307 or equivalent proficiency  
(Not offered every semester.)

**12.490 INDEPENDENT STUDY IN SPANISH****1-9 semester hours**

Provides for individual study of a particular aspect of Hispanic civilization, language, or literature under the supervision of a faculty member.

Prerequisite: Consent of instructor and of chairperson

**Russian**  
(Code 13)

**13.101 RUSSIAN I**                   **3 semester hours**  
Develops the four language skills and studies elements of Russian culture. Practice in language laboratory required.  
(Offered fall semester only.)

**13.102 RUSSIAN II**                   **3 semester hours**

Continuation of 13.101  
Prerequisite: 13.101 or equivalent  
(Offered spring semester only.)

**13.290 INDEPENDENT STUDY IN RUSSIAN**                   **1-9 semester hours**  
Individual study of a particular aspect of Russian civilization, language, or literature under faculty supervision.  
Prerequisite: Consent of the instructor and approval of the chairperson.

**Italian**  
(Code 14)

**14.101 ITALIAN I**                   **3 semester hours**  
Course develops the four language skills and studies the Italian culture. Stresses basic grammar.  
(Not offered every semester.)

**14.102 ITALIAN II**                   **3 semester hours**  
Continuation of 14.101. Emphasizes reading and writing.  
(Not offered every semester.)

**General**  
(Code 16)

**16.109 LANGUAGE FOR SINGING**                   **1 semester hour**  
Practice and acquisition of correct pronunciation in French, German, and Italian for voice majors and students singing in choirs. Spanish upon demand.  
(Not offered every semester.)

**Latin**  
(Code 18)

**18.101 LATIN I**                   **3 semester hours**  
Develops reading and writing skills; emphasizes correct classical pronunciation. Introduction to Roman culture and civilization.  
(Not offered every semester.)

**18.102 LATIN II**                   **3 semester hours**  
Continuation of 18.101. Develops reading and translation skills; teaches classical references through selected readings.  
Prerequisite: 18.101 or equivalent  
(Not offered every semester.)

# **LIBERAL ARTS and ENGINEERING**

Advisory Committee: Stephen D. Beck, Wendelin R. Frantz, David J. Harper, P. James Moser (program coordinator), and K. Vinodgopal

This cooperative program of study leads to two baccalaureate degrees, one in liberal arts and sciences from Bloomsburg University and one in an area of engineering from either The Pennsylvania State University or Wilkes College. Candidates for these degrees spend three years at Bloomsburg University, where they study science, mathematics, pre-engineering, and a broad variety of liberal arts subjects, followed by about two years at the University Park campus of Penn State or at Wilkes College in Wilkes-Barre, where they study specific engineering disciplines.

Students may pursue an engineering education in any of the following areas:

Aerospace Engineering	Penn State
Agricultural Engineering	Penn State
Ceramic Science and Engineering	Penn State
Chemical Engineering	Penn State
Civil Engineering	Penn State
Electrical Engineering	Wilkes College or Penn State
Engineering Management in	
• Electrical engineering	Wilkes College
• Environmental engineering	Wilkes College
• Materials engineering	Wilkes College
Engineering Science	Penn State
Environmental Engineering	Wilkes College or Penn State
Industrial Engineering	Penn State
Materials Engineering	Wilkes College
Mechanical Engineering	Penn State
Metallurgy	Penn State
Mining Engineering	Penn State
Nuclear Engineering	Penn State
Petroleum and Natural Gas Engineering	Penn State

## **Core Courses**

All students in this program must complete the following 45 credits at Bloomsburg University plus additional courses specific to their field of interest in engineering:

**Physics (11 credits)**, 54.211 General Physics I, 54.212 General Physics II, 54.310 Modern Atomic Physics;  
**Chemistry (8 credits)**, 52.111 General Chemistry I, 52.112 General Chemistry II, 52.113 Chemistry Laboratory;  
**Mathematics (18 credits)**, 53.125 Analysis I, 53.126 Analysis II, 53.225 Analysis III, 53.226 Analysis IV, 53.322 Differential Equations, 53.314 Linear Algebra;  
**Computer Science (3 credits)**, 53.271 Algorithmic Processes;

**Pre-Engineering (8 credits)**, only offered alternate years, 54.301 Mechanics: Statistics, 54.302 Mechanics: Dynamics, 51.173 Introductory Engineering Graphics, 51.174 Engineering Design Graphics.

## **Specific Course Requirements (to be taken at Bloomsburg University)**

- Candidates planning to pursue an engineering degree at Wilkes College must take the following courses:

Physics, 54.315 Electronics (4 credits) or 54.400 Advanced Physics Laboratory (2 credits)

Economics, 40.211 Principles of Economics I (3 credits), 40.212 Principles of Economics II (3 credits)

One of the following:

09.213 Science, Technology, Human Values (3 credits), 41.105 Environmental Issues and Choices (3 credits), or 44.207 Ethics, Politics, and Public Policy (3 credits)

- Candidates planning to pursue an engineering degree at Penn State must take the following course:

Communication Studies, 25.103 Public Speaking (3 credits)

- Candidates in certain engineering programs must also meet additional course requirements.

Aerospace, Electrical, or Nuclear Engineering  
53.491 or 492 in Partial Differential Equations (3 credits)

Chemical or Materials Engineering

52.231 Organic Chemistry I (4 credits)  
52.232 Organic Chemistry II (4 credits)

**Note:** Chemical Engineering students are excused from taking 54.302 Mechanics: Dynamics

Environmental Engineering

52.231 Organic Chemistry I (4 credits)  
52.232 Organic Chemistry II (4 credits) or  
50.173 Anatomy and Physiology I (4 credits)  
50.174 Anatomy and Physiology II (4 credits)

Engineering Management

53.141 Introduction to Statistics (3 credits) or  
53.241 Probability and Statistics (3 credits)  
52.231 Organic Chemistry I (4 credits)  
52.232 Organic Chemistry II (4 credits)

Mining Engineering

51.101 Physical Geology (3 credits)  
51.261 Mineralogy (4 credits)

Petroleum and Natural Gas Engineering

51.101 Physical Geology (3 credits)  
51.102 Historical Geology (3 credits)

## **Additional Course Requirements**

In addition to the above requirements, all candidates must satisfy the General Education Requirements of Bloomsburg University and the specific requirements for a major (usually in the sciences or mathematics). Students should consult the program coordinator each semester as they plan their schedules to insure that all requirements are met. With careful planning, it is possible to satisfy the General Education Requirements of the university and of an engineering college simultaneously.

## **Required Academic Performance**

Students wishing to complete their studies at The Pennsylvania State University must maintain a quality point average (QPA) of 3.0 overall and a 2.75 in required core courses. In a few majors, a 2.5 overall average may be sufficient for transfer, and these are subject to change from year to year.

For transfer to Wilkes College, students must maintain a QPA of 2.5 overall. Transfer candidates to the environmental engineering, materials engineering, and engineering management programs are required to have a 2.65 QPA in science, mathematics, and pre-engineering courses, while candidates to the electrical engineering program must maintain a 2.75 average in these technical courses.

## **Admission Procedures**

To enter the program, individuals must apply and be accepted for admission to Bloomsburg University. Applicants for admission who previously were registered as degree candidates and established an academic record as degree candidates at The Pennsylvania State University prior to entering this cooperative program at Bloomsburg University will be considered readmission candidates and must meet additional enrollment criteria for readmission to The Pennsylvania State University.

Students should indicate a desire to follow this program of study at the time of admission to Bloomsburg University in order to insure sufficient time to complete all of the required courses. Notification should be made to the director of academic advisement who, in turn, will notify the coordinator of the Liberal Arts and Engineering Program. The coordinator will assign each student an academic adviser who is a member of the Pre-Engineering Advisory Committee. Students should consult both their advisers and the coordinator for assistance in schedule planning.

At the end of the second year of study, students become candidates for transfer if they have maintained a sufficiently high quality point average.

## **Transferring to Penn State**

In September of the third year of study, students should apply to transfer to The Pennsylvania State University. All correspondence and the application should clearly indicate that the transfer is requested under a cooperative 3-2 program. Nov. 30 is the application deadline. Successful applicants will

be offered provisional admission to Penn State for the following fall semester.

Completed applications should be supported by the following credentials:

- Final high school transcript of grades
- Two official copies of Bloomsburg University transcripts including all grades earned during the first two years
- Schedule of courses for all of the third year
- Recommendation from the Pre-Engineering Advisory Committee

At the end of the third year of study, two copies of the final official Bloomsburg University transcripts should be forwarded to the Admissions Office of The Pennsylvania State University. Students who have maintained the required quality point average and have completed all required courses and who are recommended by the Pre-Engineering Advisory Committee, will be offered permanent admission to Penn State.

## **Transferring to Wilkes College**

At the beginning of the third year of study, students should apply to transfer to Wilkes College through coordinator of the program at Bloomsburg University. Applications are available in the coordinator's office.

Completed applications should be supported by the following credentials:

- Final high school transcript of grades
- One official Bloomsburg University transcript including all grades earned during the first two years
- Schedule of courses for all of the third year

The Pre-Engineering Advisory Committee reviews these credentials and submits a recommendation to the dean of admissions of Wilkes College. Successful applicants will be offered provisional admission to Wilkes College for the following summer.

At the end of the third year, a copy of the final official Bloomsburg University transcript should be submitted to the coordinator. Students who have maintained the required quality point average, who have completed all the required courses, and who are recommended by the Pre-Engineering Advisory Committee, will be offered permanent admission to Wilkes College.

## **Receiving a Bloomsburg University Degree**

In January of the final year in engineering college, a student should send the registrar at Bloomsburg University an official transcript of all courses taken.

A letter indicating intent to graduate should be sent to the coordinator of the Liberal Arts and Engineering Program so that course evaluations can be made.

The registrar, upon evaluation of the transcript, will arrange for a diploma to be awarded at the university's May graduation.

# MASS COMMUNICATIONS

## Faculty

Professors Walter M. Brasch, Dana R. Ulloth; Associate Professors William A. Acierno, Maria Teresita G. Mendoza, Tamrat Mereba (chairperson); Assistant Professor John Maitlen-Harris; adjunct faculty, A. William Kelly

## B.A. in Mass Communications

Admission to the mass communications program is by application to the chair and is limited to the maximum enrollment each semester that can be reasonably accommodated by departmental resources. Each intake is limited to approximately 25 students who should have achieved a cumulative grade point average of 2.5 or higher. Acceptance into the program depends, however, not only on the QPA, but also on past mass media experience. Students should exhibit strong writing, visual, and creative qualities and a record of interest and participation in media-related extracurricular activities. Some variations also occur to help balance the number of students seeking entrance to each of the three major tracks available in mass communications. Students are, therefore, encouraged to make a case for their admission in the light of previous experience even if they feel their QPAs are unlikely alone to justify admission. Students will be notified of their acceptance as mass communications majors as quickly as possible. Students are expected to have declared their majors no later than the time they have accumulated approximately 72 credit hours.

The major in mass communications consists of a number of core courses, which are compulsory for all students and a series of sequence or major track courses, depending on the specialty students wish to study. The major consists of 18 hours in core subjects and a minimum of 15-21 hours in specialty sequence subjects. Requirements may vary in each track, and students should ensure they are certain of the minimum requirements needed to graduate.

**Core courses:** 27.110 Mass Communications and the Popular Arts or 42.226 Popular Arts in America, 27.285 Cinema Appreciation or 27.190 History of Film, 27.230 Newswriting, 25.215 Communication Theory or 25.205 Rhetorical Theory, 25.445 Organizational Communication or 25.307 Business and Professional Speech, 27.270 Contemporary Radio and Television.

**Specialization:** Students also must select a major sequence track from one of the following : journalism, public relations/advertising, or telecommunications. Second sequence courses also may be taken for free elective credit, and all mass communications majors are advised to study several courses in an area other than their major sequence.

The following sequence courses are required to make up the 15-21 hours required in addition to the 18 hours from the core sections. Students should note that a number of sequence

courses have prerequisite courses and should therefore plan their course studies to allow for these to be taken prior to enrollment in sequence courses. The departmental listings of courses indicate each prerequisite required.

**Journalism:** 27.251 PR: Theory and Practice, 27.334 Editing, 27.340 Feature Writing, 27.435 Journalism Seminar: Special Topics, 27.497 Mass Communications Internship

**Public Relations/Advertising:** 32.250 Design I, 27.251 PR: Theory and Practice, 27.261 Principles of Advertising, 25.315 Persuasion, 27.334 Editing\*, 27.340 Feature Writing\*, 27.352 Publicity and Public Relations\*, 27.366 Design in Advertising\*, 97.430 Consumer Behavior\*, 27.455 Public Relations Cases and Problems\*, 27.466 Advertising Media and Campaigns\*

**Telecommunications/Film:** 27.371 Broadcast Journalism, 27.375 Broadcast Programming and Management\*, 27.388 TV Acting and Directing\*, 27.390 Film and Video Production, 27.482 Telecom Seminar, 97.310 Marketing\*, 26.211 Theater Production, 93.345 Personnel Management\*

\*Prerequisites are needed for these courses.

## Practicums and Internships

Students also are required to participate in practicums and internships during which they are expected to practice the technical requirements of their specialties. Credit hours received for this participation will be in addition to the core and specialty areas already described. Internships both on and off campus are available; some are paid, some are not. Students are urged to complete both an off-campus and an on-campus practicum so as to be as well prepared technically as possible on graduation. Some of these practicums and internships are available on student-produced productions such as *The Voice*, Bloom Television News, and a range of other communications activities on campus.

## Journalism Certificate

The Department of Mass Communications also offers a Journalism Certificate that implies introductory preparation for writing and publication activity in teaching or in business. It is not available to students who are majoring in mass communications. The certificate is granted when a student has completed three courses chosen from designated journalism courses and at least two full years (four semesters) of satisfactory service as a staff member of *The Voice*, *Spectrum Magazine*, *Obiter*, or other acceptable campus publications.

## Admission Procedures

Students who wish to become mass communications majors must (1) file a specific application with the department chairperson, (2) submit with this application a copy of their latest transcripts, (3) indicate which of the major sequences they propose to study, (4) present a portfolio of writing or production samples in one of the mass communications areas.

**Note:** This selection is not binding and may be changed later, but students are advised to discuss their study tracks fully with their advisers so courses they undertake will count toward their final objectives.

## **COURSE DESCRIPTIONS**

### **Mass Communications (Code 27)**

*Cocurricular activities—Association of Public Relations Students; Society of Collegiate Journalists*

See secondary education program for B.S. in education, Communication Certification (Nonprint Media Option).

#### **27.110 MASS COMMUNICATIONS AND THE POPULAR ARTS**

**3 semester hours**

A comprehensive overview of mass communications and their relative impacts on society and culture. Course covers magazines, newspapers, motion pictures, radio, television, public relations, advertising, ethical codes, and media regulations.

Not applicable toward a major in mass communications.

#### **27.190 HISTORY OF FILM**

**3 semester hours**

An overview of the history and growth of the motion picture. It studies film genres, historical figures, technicians, and performers. Students must view approximately 15 films during the course in laboratory showings.

(Offered spring semester only.)

#### **27.230 NEWSWRITING**

**3 semester hours**

A practical course that outlines the "theory" and techniques of news reporting. It includes an outline of the historical development of reporting, its practices and principles, and the organizational patterns of news stories and gathering of news. An elementary outline of defamation and libel is included. (Student should be able to type 30 to 40 words per minute before enrolling in this course.)

#### **27.251 PR: THEORY AND PRACTICE**

**3 semester hours**

An introduction to the development, principles, theories, and practice of public relations as a social and organizational implement. It looks briefly at the communication process, publicity, community relations, and public affairs practice.

#### **27.261 PRINCIPLES OF ADVERTISING**

**3 semester hours**

Introduces students to the basic objectives and procedures of advertising in a modern economy. It examines the variety of components and methods used to achieve specific objectives in advertising campaigns as well as the type of instruments that may be used for advertising.

#### **27.270 CONTEMPORARY RADIO AND TELEVISION**

**3 semester hours**

Provides a survey of contemporary radio and television as an industry, an art, and a technology. Course includes some laboratory-type work in classroom.

#### **27.271 MEDIA OPERATIONS**

**3 semester hours**

Course concentrates on the knowledge and physical use of technical requirements that operate the growing range of equipment needed to produce contemporary radio, television, and video programs. **Experimental course.**

#### **27.285 CINEMA APPRECIATION**

**3 semester hours**

Course examines film form, theory, and criticism to bring about a better understanding and greater appreciation of the motion picture. It is designed to enhance the visual appreciation required in modern media. Students view approximately 15 films.

(Offered fall semester only.)

#### **27.297 MASS COMMUNICATIONS PRACTICUM**

**1 semester hour**

Requires student participation in film, television, radio, or print productions in any of the sequences offered in the department or others on campus having similar needs relevant to mass communications. Students must participate in two semesters of practicums to receive 1 credit hour. May be repeated for a maximum of three semester hours.

#### **27.310 MEDIA LAW**

**3 semester hours**

A survey of legal restraints that influence the nature and content of mass media messages and business practices. The course covers historical developments, criminal libel, sedition, defamation, privacy, copyright, obscenity, shield law, freedom of information, free press-free trial, unique broadcast policies, advertising, and antitrust problems. **Experimental course.**

#### **27.315 SOCIAL FOUNDATIONS OF MASS COMMUNICATIONS**

**3 semester hours**

An interdisciplinary study of the historical, philosophical, social, economic, and legal foundations of American mass media as a base for study of contemporary mass media. Course looks at media from the perspective of journalists, owners, audiences, and government. **Experimental course.**

#### **27.334 EDITING**

**3 semester hours**

Designed to improve writing for newspapers, magazines, and brochures. It indicates particular types of styles most used; the need for good, tight copy in news stories; the practice of headline writing, with some elementary layout and design experience including photo editing. It also suggests some defenses to possible defamation and libel problems for copy editors.

Prerequisite: 27.230

**27.335 MEDIAGRAPHICS****3 semester hours**

A course in computer-generated design and layout problems and applications for printed and visual material including newspaper and magazine pages as well as advertising layouts and visual presentations for video and television material. **Experimental course.**

Prerequisite: 27.334

**27.340 FEATURE WRITING****3 semester hours**

Outlines basic requirements for feature-type articles for newspapers and magazines. Studies various techniques used to gather information and to develop a range of feature articles. Course includes practical work as well as the study and discussion of published articles and marketing strategies.

Prerequisite: 27.334

**27.346 MAGAZINE EDITING/PRODUCTION****3 semester hours**

A course designed to acquaint students with the principles and techniques of magazine production with emphasis on manuscript selection, editing, design, production, circulation, and marketing. A study of the nature of magazines as part of a mass communications system is included.

Prerequisite: 27.230

**27.350 PUBLIC AFFAIRS REPORTING****3 semester hours**

An advanced reporting course on the role of public affairs in news reporting in mass media. It concentrates on a number of "beats" most susceptible to news generation. Students learn basic abilities consistent with entry-level professional reporting requirements in public affairs coverage including courts, police, and government.

Prerequisite: 27.340

**27.352 PUBLICITY AND PUBLIC RELATIONS****3 semester hours**

A comprehensive study of various publicity techniques used in public relations efforts of business, government, and nonprofit organizations. Students prepare press releases, public service announcements, speeches, slide programs, or other appropriate communication vehicles.

Prerequisite: 27.251

**27.366 DESIGN IN ADVERTISING****3 semester hours**

Principles of advertising layout and design in print and broadcasting. It includes hands-on experience in layout, typography, and paste-up in addition to theory.

Prerequisite: 27.261

**27.371 BROADCAST JOURNALISM****3 semester hours**

Studies technical elements of broadcast writing, script formats, and nondramatic material. It provides opportunities to study, write, and announce news, commercials, and similar broadcast material.

Prerequisite: 27.270

**27.375 BROADCAST PROGRAMMING AND MANAGEMENT****3 semester hours**

Studies television and radio management, programming, and each medium as a business and the elements of success or failure. Students also study some basic economics of media and methods of handling this material as well as codes, laws, and community interests.

Prerequisite: 27.371

**27.388 TELEVISION ACTING AND DIRECTING****3 semester hours**

Provides instruction in acting and directing for television. Course also includes laboratory hours.

Prerequisite: 27.271

**27.390 FILM AND VIDEO PRODUCTION****3 semester hours**

Reviews the basic processes of filmmaking in an introductory but comprehensive manner. Concentrates on making short silent films and requires laboratory hours and field work by arrangement. Students provide their own film stock for shooting, and pay film processing costs.

Prerequisite: 27.271

**27.415 MASS COMMUNICATION TECHNOLOGIES****3 semester hours**

A review of modern communications technologies such as computers, satellites, cable television, digital, electronic publishing, networking, compact disc, and videocassette machines. Course covers the applications, economics, legal, business, and social problems of new technology applications. **Experimental course.**

Prerequisite: 27.270

**27.435 JOURNALISM SEMINAR:  
SPECIAL TOPICS****3 semester hours**

A seminar course that studies a variety of ethical and practical problems in journalism. Topics may vary from semester to semester. Course may be repeated with different topics to a maximum of three seminars with adviser's and chairperson's approval.s.

Prerequisite: 27.230

**27.446 MAGAZINE EDITING AND PRODUCTION****4 semester hours**

A full-spectrum course designed to acquaint students with principles and techniques of magazine production including manuscript selection and editing, advertising, design, production, circulation, promotion, and various business operations. A study of the nature of magazines as part of a mass communications system is included. Each semester students produce a community/regional consumer magazine.

Prerequisites: 27.334, 340, and consent of instructor

**27.455 PUBLIC RELATIONS CASES AND PROBLEMS**

**3 semester hours**

A study of the use of publicity as a particular element of public relations. Course examines specific publicity cases and also requires practical hands-on production of written material.

Prerequisite: 27.352

**27.466 ADVERTISING MEDIA AND CAMPAIGNS**

**3 semester hours**

Study of the use of advertising media, methods of selection, and the skills and background required for media buying and traffic planning. Basic principles and applications of advertising research and campaign planning, preparation, and presentation are taught in a problem-solving format.

Prerequisite: 27.364 and 366

**27.478 INDEPENDENT STUDY**

**1-3 semester hours**

Provides for individual work and study on an area of mass communications concentration being undertaken by a student. Student should find a faculty sponsor/adviser and prepare a written proposal, which must have departmental approval and approval of the dean, College of Arts and Sciences.

Prerequisite: 27.470

**27.480 TELECOM WORKSHOP:  
SPECIAL TOPICS**

**3 semester hours**

A practical workshop program in which telecommunications majors will undertake specific instruction on the technical aspects of their major. Topics may change from semester to semester, and students may be required to work on specific projects, such as telethons or television news, as part of their workshop programs. Workshops may be repeated provided topics change also. Instructor's and department chairperson's approvals required. Experimental course.

Prerequisite: 27.415

**27.482 TELECOM SEMINAR**

**3 semester hours**

A seminar program that studies ethical and social problems resulting from the pervasiveness of new technologies. Topics may change from semester to semester. Students may repeat seminars, subject to a change in topic and with the approvals of the instructor and department chairperson.

Prerequisite: 27.415

**27.485 RTF AUTHORSHIP  
THEORY AND PRACTICE**

**3 semester hours**

A study of the construction of documentary and dramatic material in terms of telecommunications/film semiotics with an overall survey of production and business problems. This is a project course designed primarily for film, television, and radio majors moving into mass communications production seminars. Experimental course.

Prerequisite: 27.271

**27.497 MASS COMMUNICATIONS INTERNSHIP**

**1-3 semester hours**

Open to junior and senior majors with a QPA of 2.75 in the major, although consideration also will be given for other practical experience students may offer. An internship may include on-campus or off-campus study of a particular project arranged by the student, adviser, and department chairperson. Interns also are expected to have completed several of their basic specialist courses prior to applying for internships. Projects must be submitted in writing at least a month before the project is expected to begin and must be approved by the student's adviser and department chairperson. Course may be repeated within catalog regulations. Internships will become a compulsory part of the mass communications program. Credit for the course is based on 3 credits for each 10 hours of work undertaken per week per semester. Limit is 12-15 total credit hours to graduation for internships. Special arrangements must be made for summer internships.

Prerequisite: 27.415

**Note:** Prerequisites may be waived by an instructor subject to the concurrence of the departmental chairperson.

# MATHEMATICS and COMPUTER SCIENCE

## Faculty

Professors Harold J. Bailey, Stephen D. Beck, Charles M. Brennan, Paul C. Cochrane, JoAnne S. Grawney, Paul G. Hartung, J. Edward Kerlin Jr., James C. Pomfret (chairperson), June L. Trudnak; Associate Professors Leroy H. Brown, E. Dennis Huthnance Jr., Ronald W. Novak, Clinton J. Oxenrider, Mehdi Razzaghi, John H. Riley Jr., (assistant chairperson/CS coordinator); Assistant Professors James Chiavacci, Curt Jones, Ampalavanar Nanthakumar, Thomas L. Ohl; Instructors Zhira Khan, Rebecca Spurlock

## B.S. in Computer and Information Science

**Required CIS:** 56.121, 122, 240, 330, 350, 355; 92.350, 356

**Required Non-CIS:** 25.103; 53.125, 126, 185, 241

**Specialized Requirements in CIS** (select 15 credits): 56.210, 373, 471, 472, 378, 374, 410, 361, 491; 92.352, 354, 358

## B.A. in Mathematics

Mathematics 53.125, 126, 185, 225, 226, 241, 310, 314; at least two 3-credit computer science courses at the 200-level or above, or 53.177; and at least one 3-credit computer science course at the 200-level or above. At least three 3-credit mathematics courses at the 300-level including at least two from the classical core consisting of 53.322, 331, 360, 411, 421, 422, and 451. At least 6 credit hours in a discipline to which mathematics is traditionally applied (as approved by the adviser). Courses 53.311 and 56.305 may not be counted in fulfilling requirements for the major. The total semester hours required for the B.A. are 45.

## B.S. in Mathematics

Mathematics 53.125, 126, 185, 225, 226, 241, 310, 314; Physics 54.211, 212; at least two 3-credit computer science courses at the 200-level or above or 53.177; and at least one 3-credit computer science course at the 200-level or above. At least three 3-credit mathematics courses at the 300-level or above including two from the classical core (see above). A 9-credit concentration in a special interest area within mathematics or in a related discipline; sample areas of concentration available upon request. The total semester hours required for the B.S. are 56.

## COURSE DESCRIPTIONS

Mathematics  
(Code 53)

### 53.101 MATHEMATICAL THINKING

3 semester hours

Presents mathematical topics and applications in a context designed to promote quantitative reasoning and the use of mathematics in solving problems and making decisions. Suitable for humanities and education majors and others who seek a broad view of mathematics. Background in algebra not required.

### 53.111 FINITE MATHEMATICS

3 semester hours

Presents an introductory development of counting techniques, probability spaces, and game theory.

### 53.112 TRIGONOMETRY

3 semester hours

Studies basic trigonometric ratios and their applications along with an extension to circular functions and their multi-faceted relationships.

Prerequisite: 53.114 or two years of high school algebra or the equivalent.

### 53.113 PRE-CALCULUS

3 semester hours

Studies elementary algebraic functions and relations, exponential, and logarithmic functions, circular functions and inverse functions, and their applications.

Prerequisite: 53.114 or two years of high school algebra and 53.112 or high school trigonometry or their equivalent.

### 53.114 COLLEGE ALGEBRA

3 semester hours

Studies fundamental algebraic concepts and develops the mathematical and computation skills necessary to apply algebraic techniques to problems in business, economics, the social and natural sciences, and the liberal arts.

Prerequisite: 1 1/2 years of high school algebra or the equivalent. Not open to students with credit for 53.112 or higher.

### 53.118 APPLIED MATRIX ALGEBRA

3 semester hours

Introduces vectors, matrices, linear equations, and linear programming with applications to the social and biological sciences and business.

Prerequisite: Two years of high school algebra or the equivalent

### 53.123 ESSENTIALS OF CALCULUS

3 semester hours

Course presents the basic concepts of elementary calculus in a nonrigorous approach for students who are not mathematics majors. Pertinent topics in the real number system, analytic geometry, functions, and limits prepare the student for the study of the basic techniques of differentiation and integration.

**Prerequisite:** At least two years of high school algebra. Course is not for mathematics, chemistry, or physics majors.

**53.124 ESSENTIALS OF CALCULUS II** 3 semester hours

Techniques and applications of integration with an introduction to infinite series and elementary differential equations as a continuation of the material in 53.123.

**Prerequisite:** 53.123. Course is not for mathematics, chemistry, or physics majors.

**53.125 ANALYSIS I** 3 semester hours

Analysis I is designed to meet part of the major-level mathematics requirement. It is first in the sequence of four calculus courses. Course provides the basic tools for differentiation and the beginnings of integration for functions of a single variable.

**Prerequisite:** Four years of high school math including one year of elementary functions or the equivalent of 53.113.

**53.126 ANALYSIS II** 3 semester hours

Studies techniques of integration, transcendental functions, infinite series, Taylor's theorem, some special differential equations, and polar coordinates.

**Prerequisite:** 53.125

**53.141 INTRODUCTION TO STATISTICS** 3 semester hours

Reading, interpreting, and constructing tables of statistical data, statistical measure; application of basic skills of statistics.

**Prerequisite:** High school algebra

**53.185 DISCRETE MATHEMATICS** 3 semester hours

An introduction to set theory, logic, combinatorics, and graph theory for those interested in mathematics or computer science.

**Prerequisite:** 53.125 or consent of instructor. Not usually taken in first semester of freshman year.

**53.201 THEORY OF ARITHMETIC** 3 semester hours

Presents the language of sets, the four elementary operations through the real number system, and the elementary theory of numbers.

**Prerequisite:** Not open to freshmen. For majors in elementary education, special education, or communication disorders.

**53.202 GEOMETRY AND LOGO FOR ELEMENTARY TEACHERS** 3 semester hours

Presents the content of geometry for the elementary curriculum using inductive reasoning and the Logo computer language.

**Prerequisite:** 53.201 or consent of instructor

**53.225 ANALYSIS III**

**3 semester hours**

Presents vector analysis in the plane and three dimensional space. Systems of linear equations, matrix algebra, linear transformations, partial derivatives.

**Prerequisite:** 53.126

**53.226 ANALYSIS IV**

**3 semester hours**

Presents curves and parametric equations, surfaces, Taylor's theorem, functions between Euclidean spaces, and multiple integrals.

**Prerequisite:** 53.225

**53.231 COLLEGE GEOMETRY**

**3 semester hours**

Presents elementary geometry from an advanced standpoint. Discusses incidence in the plane and in space, congruence, inequality, and similarity concepts. Studies properties of circles, polygons, and spheres.

**Prerequisite:** High school geometry

**53.241 PROBABILITY AND STATISTICS**

**3 semester hours**

Studies descriptive and inferential statistics with emphasis on probabilistic distribution. Practiced training in the calculation of various statistical measures is included. A more rigorous course than 53.141.

**Prerequisite:** 53.126 (or current enrollment) and 53.185

**53.243 NONPARAMETRIC STATISTICS**

**3 semester hours**

Course presents standard nonparametric statistical procedures. After a brief review of hypothesis testing fundamentals, topics such as goodness-of-fit tests, one- and two-sample procedures for location parameter, tests of randomness, and association analysis are covered.

**Prerequisite:** 53.123 or 125 and 53.141 or the equivalent

**53.310 INTRODUCTION TO ABSTRACT ALGEBRA**

**3 semester hours**

Provides an introduction to the language and methods of abstract mathematics. Subjects include sets, relations, rings, functions, groups, and fields.

**Prerequisite:** 53.185 and 225

**53.311 ALGEBRA FOR SECONDARY SCHOOL TEACHERS** 3 semester hours

Presents topics of elementary algebra from an advanced viewpoint. Considers topics of contemporary school mathematics programs. Course is intended for students in secondary education program majoring in mathematics.

**Prerequisite:** 53.310

(Offered alternate years.)

**53.314 LINEAR ALGEBRA****3 semester hours**

Studies abstract vector spaces, linear transformation, matrices, determinants, inner product spaces, and related topics.

Prerequisite: 53.185 and 225

**53.322 DIFFERENTIAL EQUATIONS****3 semester hours**

Studies elementary ordinary differential equations, infinite series and power series solution, some numerical methods of solution, and LaPlace transforms.

Prerequisite: 53.225

**53.331 MODERN GEOMETRY****3 semester hours**

Presents non-euclidean geometries and their development from postulate systems and a formal approach to projective geometry.

Prerequisite: 53.231

**53.341 MATHEMATICAL STATISTICS****3 semester hours**

Course is the continuation of Probability and Statistics (53.241). Emphasis on using the concepts taught in that course to make inferences from data.

Prerequisite: 53.185 and 225

**53.360 NUMBER THEORY****3 semester hours**

Presents the theory of numbers. Includes the topics of Euclidean algorithm, congruences, continued fractions, Gaussian integers, and Diophantine equations.

Prerequisite: 53.185 and 225

**53.361 CODING AND SIGNAL PROCESSING****3 semester hours**

A mathematical approach to codes and ciphers. Includes security codes, coding for efficiency in computer storage, error-correcting codes. Signal processing, including the Fourier transform and digital filters. Individual projects required.

Prerequisite: 53.126 and 271  
(Offered fall semester only.)

**53.374 INTRODUCTION TO DISCRETE SYSTEMS SIMULATION****3 semester hours**

Studies the ways that systems can be modeled for computer solution. Emphasizes stochastic behavior by discrete random processes and the simulation tools for their solution.

Prerequisite: a calculus course, a statistics course, and a programming course.

(Offered spring semester only.)

**53.381 INTRODUCTION TO OPERATIONS RESEARCH****3 semester hours**

A survey of the methods and models used in applying mathematics to problems of business. Topics to be drawn

from decision making, linear, and dynamic programming, networks, inventory models, Markov processes, and queuing theory.

Prerequisite: 53.118 and 123 or 225

**53.411 INTRODUCTION TO GROUP THEORY****3 semester hours**

Study of the theorems and applications of group theory begun in abstract algebra continued.

Prerequisite: 53.310  
(Offered alternate years.)

**53.421 ADVANCED CALCULUS****3 semester hours**

Presents a rigorous treatment of the concepts of limit, continuity, derivative, and integral for functions of a single real variable.

Prerequisite: 53.226 and consent of the instructor  
(Offered alternate years.)

**53.422 COMPLEX VARIABLES****3 semester hours**

Presents a rigorous treatment of the complex numbers and theory of functions of a complex variable, limits, continuity, analytic functions, Cauchy-Riemann equations, contour integrals, conformal mappings, and applications.

Prerequisite: 53.226 and consent of the instructor  
(Offered alternate years.)

**53.451 INTRODUCTION TO TOPOLOGY****3 semester hours**

Introduces fundamentals of general topology; elementary set theory, topological spaces, mappings, connectedness, compactness, completeness, product and metric spaces; nets and convergence.

Prerequisite: 53.226 and consent of the instructor  
(Offered alternate years.)

**53.461 APPLIED REGRESSION ANALYSIS AND ANALYSIS OF VARIANCE****3 semester hours**

Studies fundamental regression models and inferences concerning the parameters involved. Basic analysis of variance models are presented and discussed.

Prerequisite: 53.241, 314, or consent of the instructor

**53.462 INTRODUCTION TO DATA ANALYSIS AND MODELING****3 semester hours**

Course introduces various data analysis techniques, e.g., plots, graphs, transformations, and diagnostics, influence analysis. Regression models including log-linear and logistic models fitted to data. Course emphasis on computer use.

Prerequisite: 53.341 or 241 and consent of the instructor

**53.471 NUMERICAL ANALYSIS****3 semester hours**

Provides a computer-oriented analysis of algorithms of numerical analysis. Includes the topics of non-linear equations, interpolation and approximation, differentiation and

integration, matrices and differential equations.

Prerequisite: 53.322 and 373

(Offered alternate years.)

### 53.472 MATRIX COMPUTATION

3 semester hours

Presents a computer-oriented analysis of matrices. Includes Gaussian reduction, LDU factorization, special reduction techniques for tridiagonal matrices, iterative methods, and a study of the matrix eigenvalue problem.

Prerequisite: 53.118 or 225 and 373

(Offered alternate years.)

### 53.491 SPECIAL TOPICS IN MATHEMATICS

3 semester hours

Presents an area of mathematics which is not available as a regular course offering.

Prerequisite: Consent of the instructor

### 53.492 INDEPENDENT STUDY IN MATHEMATICS

1-3 semester hours

Provides for directed study of a particular area of mathematics as mutually agreed upon by the student and the instructor. Emphasizes individual scholarly activity of the highly motivated student.

### 53.493 HONORS INDEPENDENT STUDY IN MATHEMATICS

3 semester hours

Course is for students who have demonstrated a high level of interest and ability in mathematics and have mastered the required course work. Students investigate research problems selected under the supervision of a faculty member of the Department of Mathematics and Computer Science.

Prerequisite: Admission to the Honors Program in natural sciences and mathematics

## COURSE DESCRIPTIONS

### Computer Science

(Code 56)

### 56.110 INTRODUCTION TO COMPUTER SCIENCE

3 semester hours

Presents an introduction to computers and data processing-what they are, how they function, how they are controlled, and how they are used in problem solving. Basic concepts include hardware, I/O systems, data communication and storage, flow charting, and programming in BASIC on a microcomputer.

### 56.121 COMPUTER SCIENCE I

3 semester hours

An introduction to computer science with an emphasis on programming. Involves the use of a high-level language and the development of good programming style and fundamental techniques.

Prerequisite: 56.110 or the equivalent

### 56.122 COMPUTER SCIENCE II

3 semester hours

The design and execution of applications software using the Pascal language; utilizes the principles of modularization, top-down design, and the fundamental algorithms of searching, sorting, stacks, queues, linked lists, trees, and recursion.

Prerequisite: 56.121

### 56.210 ALGORITHMIC PROCESSES FOR COMPUTERS

3 semester hours

Course emphasizes the concepts of FORTRAN 77; input and output, program documentation and control, structured programming, extended modes of arithmetic, character strings, and program development and execution.

Prerequisite: Programming experience or consent of the instructor

### 56.240 MICROCOMPUTER CONCEPTS

3 semester hours

Advanced topics in programming with a microcomputer, operating systems, introductory concepts of microcomputer architecture, and machine and assembly language for microprocessors.

Prerequisite: 56.121

### 56.305 COMPUTER APPLICATIONS IN SECONDARY SCHOOL MATHEMATICS

3 semester hours

Studies the theory, design, and usage of a computer as an instructional or training tool. The microcomputer used to demonstrate and develop software applications.

Prerequisite: 56.121

### 56.320 INTRODUCTION TO LOGIC PROGRAMMING

3 semester hours

Use of logic for programming, logic interpreters, recursive programming, nondeterministic, and nonprocedural

programming. Program verification and correctness. Applications.

Prerequisite: 56.122 or 92.256 and 53.185 or consent of the instructor.

#### **56.330 COMPUTER ORGANIZATION**

**3 semester hours**

Design of combinational and sequential circuits. Coding, various instruction formats and representation of data. Memory, central processors, input-output devices. Introduction to computer architecture. Characteristics and features of some existing computer systems.

Prerequisite: 53.185 and 56.121  
(Offered spring semester only.)

#### **56.350 ORGANIZATION OF PROGRAMMING LANGUAGES**

**3 semester hours**

An introduction to the issues of programming languages: syntax, semantics, parsing, language specification, and analysis. Emphasis on the run-time behavior of programming language constructs.

Prerequisite: 56.240

#### **56.355 ANALYSIS OF ALGORITHMS AND DATA STRUCTURES**

**3 semester hours**

A detailed analysis of algorithms and data structures. Examination of theoretical and experimental performance of algorithms and data structures. Particular attention to algorithms for searching and sorting and techniques for implementing and manipulating various data structures: stacks, queues, trees, graphs, and files.

Prerequisite: 56.122

#### **56.361 CODING AND SIGNAL PROCESSING**

**3 semester hours**

A mathematical approach to codes and ciphers. Includes security codes, coding for efficiency in computer storage, error-correcting codes. Signal processing, including the Fourier transform and digital filters. Individual projects required.

Prerequisite: 53.126 and 56.210  
(Offered fall semester only.)

#### **56.373 NUMERICAL METHODS IN COMPUTING**

**3 semester hours**

An analysis and application of various methods of numerically solving problems in the areas of nonlinear equations; systems of equations, interpolation, and polynomial approximation; numerical integration; approximation theory; and differential equations. Students design and execute algorithms on the computer for specific numerical procedures.

Prerequisite: 53.124, 126, and 56.210

#### **56.374 INTRODUCTION TO DISCRETE SYSTEMS SIMULATION**

**3 semester hours**

Studies the ways in which systems can be modeled for computer solution. Emphasizes stochastic behavior by

discrete random processes and the simulation tools for their solution.

Prerequisite: A calculus course, a statistics course, and a programming course.  
(Offered spring semester only.)

#### **56.410 COMPUTER GRAPHICS**

**3 semester hours**

Presents the basic principles for design, use, and understanding of graphics systems. Hardware and software components of graphics systems examined with a major emphasis on creating and manipulating graphics displays using a software graphics package; the package includes standard computer graphics algorithms. Two and three dimension graphics, animation, color, hidden line, and hidden surface algorithms studied in depth.

Prerequisite: 53.124 or 126, and 56.121

#### **56.471 NUMERICAL ANALYSIS**

**3 semester hours**

Provides a computer-oriented analysis of algorithms of numerical analysis. Topics include nonlinear equations, interpolation and approximation, differentiation and integration, matrices and differential equations.

Prerequisite: 53.322 and 56.373  
(Offered alternate years.)

#### **56.472 MATRIX COMPUTATION**

**3 semester hours**

Presents a computer-oriented analysis of matrices. Includes Gaussian reduction, LDU factorization, special reduction techniques for tridiagonal matrices, iterative methods, and a study of the matrix eigenvalue problem.

Prerequisite: 53.118 or 225, and 56.373  
(Offered alternate years.)

# MUSIC

## Faculty

Professor William K. Decker; Associate Professors John H. Couch, Stephen C. Wallace (chairperson); Assistant Professors Mark R. Jelinek, Wendy L. Miller, Terry A. Oxley, W. Ann Stokes

The Department of Music serves the entire university community through its music organizations, its opportunity for private lessons, concerts by the ensembles, recitals by students and faculty, courses which may be taken in partial fulfillment of the Group A requirement for general education, and music courses for elementary education majors.

Credit may be earned in seven ensembles: Maroon and Gold Band, Concert Choir, Women's Choral Ensemble, University-Community Orchestra, Husky Singers, Studio Band, and Madrigal Singers. Enrollment in an ensemble is based on selection, permission, or successful audition. The ensembles are described as courses 35.111-35.117. A student may utilize a maximum of 6 credits in ensembles toward a baccalaureate degree.

Private lessons in voice, organ, piano, strings, woodwinds, brass, and percussion are available to qualified students. As many as 8 semester hours of private instruction may be earned in one of these instruments in as many semesters, 16 semester hours in 8 semesters for music majors specializing in applied music. The number of students accepted for private lessons is limited by faculty load, and acceptance or continuation is reserved for those who exhibit potential or demonstrate development. Private lessons, described as course numbers 35.141, 142, 143, 144, 151, 161, 162, 163, 164, 165, 171, 181, 191, 192, 193, 194, 195, 196, and 241, 242, 243, 244, 251, 261, 262, 263, 264, 265, 271, 281, 291, 292, 293, 294, and 295 for majors in music may be elected after consultation with the respective faculty instructors. (For voice, contact Drs. Decker or Miller; for organ, Decker; for piano, Couch; for woodwinds and percussion, Terry Oxley; for brass, Wallace; and for strings, Jelinek and Stokes.)

## B.A. in Music

35.131, 132, 133, 134, 231, 232, 331, 332, 221, and 222; demonstration of piano proficiency by examination and/or election of 35.108; 8 semesters (4 semester hours) of ensemble; 101 is recommended; and one of the following two options:

*Music History and Literature*—16 semester hours; 35.421, 422, and 9 semester hours through courses 35.324, 325, and 327; also 4 semester hours of choice of the instruments or voice.

*Applied Music Option*—16 semester hours: one instrument or voice for 8 semesters. Selection of voice as the applied music option requires 16 semester hours in language courses: 16.109, 10.101, 102, (French) 11.101, 11.102, (German) and 14.101 (Italian). Early declaration of a music major is advised.

## Minor in Music

The minor in music is a 22-semester hour program emphasis that may be selected by undergraduate students who major in a program other than the Bachelor of Arts in music. The minor, which may be completed in 8 or fewer semesters, is built from code 35 courses that include music theory, ear training, music history and style, applied study, and performing ensembles: 35.101, 111, 112, 113, 114, 115, 116, 117, 131, 132, 133, 134, 141, 142, 143, 144, 151, 161, 162, 163, 164, 165, 171, 181, 191, 192, 193, 194, 195, 196, 208, 209, 221, 222, 225, 226, 228, 229, 231, 232, 233, 311, 324, 325, 327, 331, 332, 350, and 497.

Seven different specialty tracks (options) within the minor are available:

1. Applied Voice
2. Applied Instrumental
3. Applied Keyboard (piano/organ)
4. History-Literature
5. Theory
6. Flexible

7. Audio Recording Technique (also available in career concentration format with 32 semester hours.)

Advisement and program details are available through the department chairperson. Early election is recommended.

## Career Concentration

The "audio recording techniques" career concentration, a cross-discipline vocation preparation, is available in cooperation with the Departments of Mass Communications and Physics. Internship is required.



## **COURSE DESCRIPTIONS**

**Music  
(Code 35)**

(Courses offered each semester unless otherwise noted.)

### **35.101 MUSIC LISTENING I**

**3 semester hours**

Provides an approach to music listening through study of basic vocal and instrumental styles. Analysis of various masterpieces, composers, and musical forms. Requires no previous musical experience. Recommended first-course in nonapplied music.

### **35.108 PIANO PROFICIENCY**

**1 semester hour**

Provides opportunity for majors in music to gain proficiency at the keyboard. May be repeated.

### **35.111 MAROON AND GOLD BAND**

**0-1 semester hour**

Performs music of varied styles and periods. Marching band each fall, concert band each spring. Requires 5 hours per week each fall and 4 hours per week each spring. Requires 2 semesters for 1 semester hour. Selective admission. Contact Dr. Oxley.

### **35.112 CONCERT CHOIR**

**0-1 semester hour**

Performs music of varied styles and periods, stressing oratorio and a cappella literature. Requires 4 hours per week for 2 semesters for 1 semester hour. Selective admission. Contact Dr. Decker.

### **35.113 WOMEN'S CHORAL ENSEMBLE**

**0-1 semester hour**

Performs varied styles from popular to masterworks. Requires 3 hours per week for 2 semesters for 1 semester hour. For admission, contact Dr. Miller.

### **35.114 UNIVERSITY-COMMUNITY ORCHESTRA**

**0-1 semester hour**

Performs music appropriate to the symphony orchestra. Requires 3 hours per week for 2 semesters for 1 semester hour. Election requires consent of the instructor. Contact Dr. Jelinek.

### **35.115 STUDIO BAND**

**0-1 semester hour**

Performs jazz, swing, and other forms representing the big band style. Requires 3 hours per week for 2 semesters for 1 semester hour. Election requires consent of the instructor. Audition may be necessary. Contact Dr. Wallace.

### **35.116 HUSKY SINGERS**

**0-1 semester hour**

Performs varied music for men's chorus. Requires 2 hours per week for 2 semesters for 1 semester hour. No audition required. Contact Dr. Decker.

### **35.117 MADRIGAL SINGERS**

**0-1 semester hour**

Performs music of many styles and periods, primarily music of the Renaissance. Open to singers from other university vocal ensembles. Membership by audition only. Requires 3 hours per week for 2 semesters for 1 semester hour. Contact Dr. Miller.

### **35.130 FUNDAMENTAL MUSICIANSHIP**

**3 semester hours**

Explores personal music understanding and development through elementary terminology, symbols, theory, music reading, singing, playing, and chording of simple instruments and bodily movement to music. Suggested for students with little musical background as preparation for applied study and courses 35.311, 131, and 133. Recommended first-course in applied music.

(Offered in spring semester only.)

### **35.131 THEORY I**

**3 semester hours**

Studies harmony, voice leading, and keyboard harmonization. Requires 3 hours per week.

Prerequisite: 35.130 or consent of the instructor.  
(Offered fall semester only.)

### **35.132 THEORY II**

**3 semester hours**

Continues Theory I with the study of seventh chords and common-chord and chromatic modulations. Includes melodic and rhythmic dictation and keyboard realization. Requires 3 hours per week.

Prerequisite: 35.131  
(Offered spring semester only.)

### **35.133 SIGHT SINGING I**

**1 semester hour**

Development of the musical ear through progressive training. Elected by majors in music or as a single course by nonmusic majors. Requires 2 hours.

(Offered fall semester only.)

### **35.134 SIGHT SINGING II**

**1 semester hour**

Continues musical ear training. Elected by music majors or as a single course by nonmusic majors. Requires 2 hours.

Prerequisite: 35.133  
(Offered spring semester only.)

### **35.141 VIOLIN**

**1 semester hour**

Provides private instruction for students with demonstrated ability or potential. One-half hour per week.  
(May be repeated at one semester hour each election.)

### **35.142 VIOLA**

**1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at one semester hour each election.)

**35.143 VIOLONCELLO****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.144 DOUBLE BASS****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.151 ORGAN****1 semester hour**

Private instruction for those who have previously studied organ or who have strong piano backgrounds. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.161 TRUMPET****1 semester hour**

Private instructions for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.162 HORN****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.163 TROMBONE****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.164 BARITONE****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.165 TUBA****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.171 VOICE****1 semester hour**

Private instruction for students with demonstrated vocal abilities. One-half hour per week. (May be repeated at 1 semester hour each election.)

Prerequisite: 35.226

**35.181 PIANO****1 semester hour**

Private instruction for students with previous piano study. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.191 FLUTE****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.192 OBOE****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.193 CLARINET****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.194 BASSOON****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.195 SAXOPHONE****1 semester hour**

Private instruction for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.196 PERCUSSION****1 semester hour**

Private instruction with snare, timpani, and mallets for students with ability or potential. One-half hour per week. (May be repeated at 1 semester hour each election.)

**35.208 SPECIAL TOPICS IN MUSIC****PERFORMANCE****3 semester hours**

Provides a unique experience in performance or the study of performance practice. Instructor develops a one-time-only study. Information is available by contacting the Department of Music. Offered as needed.

**35.209 SPECIAL TOPICS IN MUSIC****APPRECIATION****3 semester hours**

Provides a unique study of music beyond currently available course topics. Instructor develops a one-time-only study. Information is available by contacting the Department of Music. Offered as needed.

**35.221 MUSIC HISTORY I****3 semester hours**

Emphasizes understanding and appreciation of music from medieval times to 1750 through listening and development of a technical vocabulary.

(Offered fall semester of even-numbered years.)

**35.222 MUSIC HISTORY II****3 semester hours**

Provides an overview of music history covering the years 1750 to the present time. Includes discussion of composers and other significant persons, works, and development of forms and genres during this time frame.

(Offered spring semester of odd-numbered years.)

**35.224 CLASS PIANO I****2 semester hours**

Provides group piano instruction for the beginner. Emphasizes solo playing, creative accompaniments, and sight-reading. Requires three hours per week. Limited seating.

Prerequisite: Consent of the faculty pianist, Dr. Couch

**35.225 CLASS PIANO II****2 semester hours**

Develops independence in solo playing and accompanying. Continuation of 35.224 for students with demonstrated abilities. Requires 3 hours per week.

Prerequisite: Consent of the faculty pianist, Dr. Couch

**35.226 CLASS VOICE****2 semester hours**

Provides group voice instruction for the beginner. Emphasizes fundamental singing techniques and solo performance. Requires 3 hours/week.

Prerequisite to 35.171 and 35.271

**35.227 CLASS STRINGS****2 semester hours**

The learning of fundamental string skills and related information for string instruments. Requires 3 hours per week. 35.130 recommended for nonreaders of musical notation.

**35.228 SEMINAR IN PIANO ACCOMPANYING****2 semester hours**

Provides instruction, coaching, systematic score study, and critical performing experience for pianists. Requires 3 hours per week and includes performing.

**35.231 THEORY III****3 semester hours**

Continuation of theory. Includes formal analysis, design, original composition, harmonic dictation, and perception skills. Requires 3 hours per week.

Prerequisite: 35.132

(Offered fall semester of odd-numbered years.)

**35.232 THEORY IV****3 semester hours**

Continuation of theory. Reviews 20th century compositional styles. Includes analysis and composition. Requires 3 hours per week.

Prerequisite: 352.132 or consent of the instructor

(Offered spring semester of even-numbered years.)

**35.233 CHORAL CONDUCTING AND METHODS****3 semester hours**

Examines the development of techniques and abilities for participating in and supervising choral ensembles. Stresses tone production, proper breathing, choral conducting, and reading of appropriate literature.

(Offered spring semester of even-numbered years.)

**35.241 VIOLIN FOR MUSIC MAJORS****2 semester hours**

Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.242 VIOLA FOR MUSIC MAJORS****2 semester hours**

Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.243 VIOLCENCELLO FOR MUSIC MAJORS****2 semester hours**

Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.244 DOUBLE BASS FOR MUSIC MAJORS****2 semester hours**

Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.251 ORGAN FOR MUSIC MAJORS****2 semester hours**

Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.261 TRUMPET FOR MUSIC MAJORS****2 semester hours**

Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.262 HORN FOR MUSIC MAJORS****2 semester hours**

Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.263 TROMBONE FOR MUSIC MAJORS**  
2 semester hours  
Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.264 BARITONE FOR MUSIC MAJORS**  
2 semester hours  
Provides two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.265 TUBA FOR MUSIC MAJORS**  
2 semester hours  
Provides two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.271 VOICE FOR MUSIC MAJORS**  
2 semester hours  
Provides two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.281 PIANO FOR MUSIC MAJORS**  
2 semester hours  
Provides two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)  
(Offered fall semester of odd-numbered years.)

**35.229 CLASS INSTRUCTION IN BRASS**  
2 semester hours  
Provides group brass instruction for the beginner or the brass player who wishes to double. Emphasizes fundamental technique and elementary performance. Requires 2 hours per week.  
Prerequisite: 35.130 or consent of the instructor  
(Offered fall semester of even-numbered years.)

**35.291 FLUTE FOR MUSIC MAJORS**  
2 semester hours  
Provides two weekly half-hour lessons for students electing applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.292 OBOE FOR MUSIC MAJORS**  
2 semester hours  
Provides two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.293 CLARINET FOR MUSIC MAJORS**  
2 semester hours  
Provides two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.294 BASSOON FOR MUSIC MAJORS**  
2 semester hours  
Provides two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.295 SAXOPHONE FOR MUSIC MAJORS**  
2 semester hours  
Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in music program. (May be repeated at 2 semester hours each election for a maximum of 16 credits.)

**35.311 MUSIC IN THE ELEMENTARY SCHOOL**  
3 semester hours  
Provides students with practical skills, theoretical background, and musical knowledge that will enable them to teach general music effectively in the elementary classroom. Course designed primarily for elementary education majors. Limited seating.

**35.324 AMERICAN MUSIC**  
3 semester hours  
Analyzes works of selected American composers with reference to characteristics indigenous to American music.  
Prerequisite: 35.101  
(Offered fall semester of even-numbered years.)

**35.325 OPERA AND MUSIC THEATER**  
3 semester hours  
Studies great works of the lyric stage. Emphasizes listening and reading works of opera, operetta, and the popular theater.  
Prerequisite: 35.101  
(Offered spring semester of odd-numbered years.)

**35.327 SURVEY OF POPULAR MUSIC**  
3 semester hours  
Analyzes factors and elements of American popular music with emphasis on developments in the 20th century. Includes a chronological study of jazz, balladry, spiritual, country-western, theater, film, and rock in comparative listening situations.

Prerequisite: 35.101  
(Offered fall semester of odd-numbered years.)

**35.329 INSTRUMENTAL CONDUCTING**  
2 semester hours  
The course will develop skills in baton technique and score reading with emphasis on practical application in the

instrumental organizations. Laboratory course with three 50 minute sessions per week.

Prerequisite: Music major, junior standing

### **35.331 THEORY V, COUNTERPOINT**

**2 semester hours**

Continuation of theory. Studies melodic writing in two and three voices through the 18th century style. Requires 2 hours per week.

Prerequisite: 35.132

(Offered fall semester of even-numbered years.)

### **35.332 THEORY VI, ORCHESTRATION**

**2 semester hours**

Continuation of theory. Examines instrumental transposition, idioms, score writing, and analysis. Requires 2 hours per week.

Prerequisite: 35.331

(Offered spring semester of odd-numbered years.)

### **35.350 SEMINAR IN MUSIC THEATER**

**3 semester hours**

Studies the Broadway musical with special emphasis on works currently in production.

(Offered in conjunction with some productions during the spring semester, and in the summer.)

### **35.421 SEMINAR IN MUSIC HISTORY I**

**2 semester hours**

Emphasizes development of skill in independent research in areas of music history for majors in music electing the music history specialization.

Prerequisite: 35.221, 222, 223

(Offered as needed.)



### **35.422 SEMINAR IN MUSIC HISTORY II**

**1 semester hour**

Continuation of 35.421 with emphasis on academic research and musicology for majors in music electing the music history specialization.

Prerequisite: 35.421

(Offered as needed.)

### **35.491 INDEPENDENT STUDY IN MUSIC**

**1-3 semester hours**

Provides for a student project of a creative nature in music history, education, or performance.  
(See section on Preprofessional and Career Advisement.)

### **35.497 INTERNSHIPS IN MUSIC**

**1-9 semester hours**

Provides for extended off-campus field experience to be arranged by the major in music, a faculty adviser, and an off-campus agency. Requires the consent of the Department of Music prior to registration.

# PHILOSOPHY

## Faculty

Professors Richard J. Brook, William L. Carlough (chairperson), Marjorie Clay, Oliver J. Larmi; Assistant Professor Scott Lowe

## B.A. in Philosophy

Required: 28.212, 221, 224, 228 or 229  
One course chosen from 28.303, 304, 305, 306, 307, or 351  
Elective: Five additional, elective courses  
Total requirement for the major: 30 semester hours

## Minor in Philosophy

Required: 28.111, 212, 220  
Elective: Three additional courses  
Total requirements for the minor: 18 semester hours

### COURSE DESCRIPTIONS

#### Philosophy (Code 28)

- 28.111 INTRODUCTION TO PHILOSOPHY** **3 semester hours**  
Presents reflective inquiry into selected problems of general philosophic interest. Considers types of knowledge, nature of reality, individual and social values, and existence of God.
- 28.212 LOGIC** **3 semester hours**  
Reviews methods and principles of reasoning with applications to contemporary debates. Examines informal fallacies, the syllogism, predicate calculus, sentential calculus, quantification, and induction.
- 28.213 LOGIC AND COMPUTING** **3 semester hours**  
Introduces fundamental areas where logic and computation intersect including the propositional calculus and the design of logic circuits; validity and proof; Turing machines and logic programming. Stress on algorithmic methods for translation and proof.

- 28.220 ETHICS** **3 semester hours**  
Studies ethical theory focusing on such issues as ethics as a branch of knowledge, egoism vs. altruism, and role of intentions and consequences in moral judgements. Reviews theories such as relativism, utilitarianism, and Kantianism. Investigates concepts of "rights" and "justice."

#### 28.221 PLATO AND ARISTOTLE

**3 semester hours**

Studies the origins of Western philosophy in ancient Greece. Examines Plato's philosophical writings in light of pre-Socratic speculation on the one hand and in terms of Aristotle's criticisms and developments on the other.  
(Offered spring semester of odd-numbered years.)

#### 28.224 DESCARTES TO KANT

**3 semester hours**

Examines the writings of the 17th and 18th century philosophers: Descartes, Hobbes, Locke, Berkeley, Hume, Kant, and others. Topics include the nature of reality, the sources and limits of knowledge, the relation between mind and body, and the possibility of a rational basis for religious belief.

(Offered fall semester of odd-numbered years.)

#### 28.228 EXISTENTIALISM

**3 semester hours**

Studies the writings of such men as Kierkegaard, Nietzsche, Husserl, Sartre, and Tillich. Major themes include human subjectivity, human freedom, alienation, and meaning.

(Offered spring semester of even-numbered years.)

#### 28.229 CONTEMPORARY PHILOSOPHY

**3 semester hours**

Examines 20th century philosophical movement concerned with logical analysis. Emphasizes the analysts' reconstruction of the relation between language and philosophy, particularly theories of knowledge, ethics, and religion.

#### 28.270 RELIGIONS OF THE EAST

**3 semester hours**

Examines religious beliefs from primitive stages to the developed systems of Hinduism, Buddhism, Confucianism, Taoism, and Shinto. Emphasizes beliefs, traditions, and practices rather than historical data.

#### 28.271 THE WESTERN RELIGIOUS TRADITION

**3 semester hours**

Examines the four great monotheisms, Zoroastrianism, Judaism, Christianity, and Islam. Inquires into the original literature as well as the evolving theologies. Discusses modern issues within these religious traditions.

#### 28.290 MEDICAL ETHICS

**3 semester hours**

Investigates moral issues that arise in such medical contexts as human experimentation, death and dying, medical care and its distribution, genetic engineering, and the definition of health and illness.

#### 28.292 CONTEMPORARY MORAL PROBLEMS

**3 semester hours**

Investigates some of the major contemporary (and perennial) moral problems: abortion and the rights of the

fetus; pornography and its control; crime and its punishment; obedience to laws; discrimination based on race and sex; decision-making procedures; social justice; drugs, suicide, and euthanasia; freedom and its limits.

**28.294 ETHICS, POLITICS, AND PUBLIC POLICY**

**3 semester hours**

An examination of normative, descriptive, and meta-ethical approaches employed by politicians and policy makers in confronting issues of responsibility and choice in public programs and policies. The course focuses on ethical problems and responses in civic life and emphasizes the ways alternatives impact on society.

**28.295 BUSINESS ETHICS**

**3 semester hours**

Review of moral canons in relation to business practice. Moral concepts are applied in analyzing situations. Utilitarianism, Kantianism, and contemporary Egalitarianism are introduced as aids in decision making. General principles and concrete cases considered.

**28.303 PHILOSOPHY OF SCIENCE**

**3 semester hours**

Analyzes the logic of inquiry in the natural and social sciences; the nature of scientific explanation, problems of causality, measurement, prediction, and verification.

**28.304 PHILOSOPHY OF THE SOCIAL SCIENCES**

**3 semester hours**

Examines conceptual problems in the social science disciplines including objectivity, classification, explanation, nature of laws, and reductionism.

**28.305 PHILOSOPHY OF LAW**

**3 semester hours**

Examines the theoretical background of the law and legal systems. Encourages students to develop their own views about the proper use of the law. Topics discussed include the concepts of "law" and "legal system," limits of the law, and justification of punishment.

**28.306 PHILOSOPHY OF RELIGION**

**3 semester hours**

Presents a critical analysis of the origins and nature of faith. Emphasizes types of religion, evidence supporting religious belief, and problems in and challenges to religion.

**28.307 CONTEMPORARY POLITICAL PHILOSOPHY**

**3 semester hours**

Studies the nature of the good and just state. What are the limits and powers of the state? Investigates competing theories of neo-Aristotelianism, utilitarianism, contractarianism, libertarianism, Marxism, and anarchism. Important questions concerning the obligations of an individual citizen to the state will also be addressed.

**28.350 ENVIRONMENTAL ETHICS**

**3 semester hours**

Surveys attitudes towards nature, our relationship to it, the role of technology, and discussion of the ethical dimensions of the environmental crisis.

**28.351 THEORY OF KNOWLEDGE**

**3 semester hours**

Inquires into the problem of knowledge, certainty, and skepticism. Reviews the theory of perception; discusses concepts of meaning and truth.

**28.470 INDEPENDENT STUDY IN PHILOSOPHY**

**3 or 6 semester hours**

Provides for individual study of a particular philosophical problem under the guidance of the staff. Emphasizes independent research on topics selected by the student and the faculty member. Course may be taken twice.

Prerequisite: 6 semester hours of philosophy  
(See section on Preprofessional and Career Advisement.)

**28.471 SEMINAR**

**3 semester hours**

Studies selected problems in philosophy.

# PHYSICS

## Faculty

Professors David J. Harper (chairperson), P. James Moser, M. Gene Taylor; Associate Professors Jack G. Couch, P. Joseph Garcia, Levi J. Gray, Stephen G. Wukovitz; Assistant Professor Gunther L. Lange

### B.A. in Physics

Physics 54.211, 212, 302, 310, 314, 400, 12 semester hours chosen from other physics courses numbered above 300; Mathematics 53.125, 126, 225, 271, 322; Chemistry 52.111, 112, 113 (or 52.113, 118, if criteria are met).

### B.S. in Physics

Physics 54.211, 212, 302, 310, 314, 400, 450, 15 semester hours chosen from other physics courses numbered above 300; Mathematics 53.125, 126, 225, 271, 322, 3 semester hours chosen from Mathematics 53.226, 314, 373; Chemistry 52.111, 112, 113 (or 52.113, 118, if criteria are met).

### B.S. in Health Physics

The profession of health physics is devoted to the protection of people and their environment from potential radiation hazards, while at the same time making it possible for our advancing civilization to enjoy all the benefits resulting from the use of radiation. Students interested in the health physics program should contact the program's director or the chairperson of the Department of Physics.

Note: Requirements for the major for the B.S. in education are found in the section on Secondary Education under the College of Professional Studies.

### Minor in Physics

Physics 54.211, 212, 315, 316, 317

Note: These courses must be taken in sequence.

## COURSE DESCRIPTIONS

### PHYSICS (Code 54)

#### 54.101 BASIC PHYSICAL SCIENCE

3 semester hours

An introductory integration of concepts and principles from chemistry, physics, and astronomy, with consideration for the nature of scientific thought and interaction of science with human and community concerns. For nonscientists. Three hours class per week.

#### 54.103 PRINCIPLES OF PHYSICAL SCIENCE 3 semester hours

An integrated physical science course emphasizing laboratory experience. Encourages development of mental models to correspond with experience. Studies molecules, atoms, materials, and chemical change; energy, light, and electricity. For elementary education majors. Four hours class/laboratory per week.

#### 54.104 ELEMENTARY ELECTRONICS

3 semester hours

An introduction to basic electronics that gives students in nonphysical science areas some theoretical and practical knowledge of electronic circuits, instruments, and devices. No experience of physics or electronics required. Three hours class per week.

#### 54.105 ENERGY: SOURCES AND ENVIRONMENTAL EFFECTS

3 semester hours

Explains energy in elementary scientific terms and examines present national and international energy situations in regard to sources, utilization, and environmental effects. Surveys fossil fuels and nuclear, solar, geothermal, and other energies with respect to availability and promise for the future. Three hours class per week.

#### 54.106 THE SCIENCE OF SOUND

3 semester hours

Provides an introduction to the principles of sound and its reproduction for students in nonphysical science disciplines. Knowledge of basic algebra required, but no experience in physics or electronics necessary. Three class hours per week.

#### 54.107 APPLIED PHYSICS FOR HEALTH SCIENCES

4 semester hours

Studies selected principles of physics with applications to the processes and instrumentation of medical technology. Examines mechanics, fluids, kinetic energy and heat, optics, electricity and magnetism, electronics, atomic structure, radiation, and data acquisition and readout. Six hours per week: 3 class, 3 laboratory.

(Offered spring semester only.)

#### 54.110 INTRODUCTION TO ASTRONOMY

3 semester hours

Surveys physical state of the universe and the variety of objects it comprises: solar system, stars, galaxies. Provides both a description account of the present state of our knowledge of the cosmos and an understanding of how such knowledge is obtained. Intended for nonscience majors. Three class hours per week.

#### 54.111 INTRODUCTORY PHYSICS I

4 semester hours

Presents an intuitive approach to selected topics such as mechanics, heat, kinetic theory, molecular theory of gases, wave motion, and sound. Not intended for students special-

izing in physics or chemistry. Six hours per week: 3 class, 3 laboratory.

(Offered fall semester only.)

#### **54.112 INTRODUCTORY PHYSICS II**

**4 semester hours**

Studies electricity, magnetism, light, relativity, quantum and atomic theory, structure of matter, nuclear physics and particle physics. Continuation of 54.111. Six hours per week: 3 class, 3 laboratory.

Prerequisite: Physics 54.111 or consent of instructor  
(Offered spring semester only.)

#### **54.211 GENERAL PHYSICS I**

**4 semester hours**

An introduction to physics using calculus. Studies mechanics, the physics of fluids, kinetic theory, heat, and thermodynamics. Appropriate for physical science or mathematics majors. Six hours per week: 3 class, 3 laboratory.

Prerequisite: Mathematics 53.125 or concurrent registration

(Offered fall semester only.)

#### **54.212 GENERAL PHYSICS II**

**4 semester hours**

Studies wave motion, sound, geometrical and physical optics, electricity, and magnetism. Continuation of 54.211. Six hours per week: 3 class, 3 laboratory.

Prerequisite: Mathematics 53.126 or concurrent registration; Physics 54.211, or 54.111 with consent of the instructor

(Offered spring semester only.)

#### **54.301 MECHANICS: STATICS**

**3 semester hours**

Introduces the fundamentals of statics, with an emphasis on vector methods, at a level appropriate for physical science majors and for students considering a career in an engineering field. Three hours class per week.

Prerequisite: Mathematics 53.126 or concurrent registration; Physics 54.211, or 54.111 with consent of the instructor

(Offered alternate years in fall semester.)

#### **54.302 MECHANICS: DYNAMICS**

**3 semester hours**

Introduces the fundamentals of dynamics, with an emphasis on vector methods, at a level appropriate for physical science majors and for students considering a career in an engineering field. Three hours class per week.

Prerequisite: Mathematics 53.225 or concurrent registration; Physics 54.212, or 54.112 with consent of the instructor

(Offered alternate years in spring semester.)

#### **54.304 NUCLEAR RADIATIONS**

**2 semester hours**

Presents a laboratory-oriented course dealing primarily with basic techniques for detecting, measuring, and analyzing nuclear radiations. Studies applications of nuclear

radiations in science and technology. Aspects of radiation safety and radiation pollution of the environment. Four hours per week: 1 class, 3 laboratory

Prerequisite: Physics 54.212, or 54.112 with consent of the instructor

(Offered alternate years.)

#### **54.310 MODERN ATOMIC PHYSICS**

**3 semester hours**

Introduces the concepts of quantum theory, wave mechanics, and relativity in atomic and nuclear physics. Three hours class per week.

Prerequisite: Physics 54.212, or 54.112 with consent of the instructor

(Offered fall semester only.)

#### **54.314 ELECTRICITY AND MAGNETISM**

**3 semester hours**

Studies electric and magnetic fields, potential, dielectric properties, electric circuits, electromagnetic induction, and magnetic properties of matter with a brief introduction to electromagnetic waves. Three hours class per week.

Prerequisite: Physics 54.212, or 54.112 with consent of the instructor; Mathematics 53.225

(Offered alternate years.)

#### **54.315 ELECTRONICS**

**4 semester hours**

Presents the theory and application of semiconductors with special emphasis on circuitry. Studies basic electronic instrumentation as related to the gathering, processing, and display of scientific data in any discipline. Six hours per week: 3 class, 3 laboratory.

Prerequisite: Physics 54.112 or 54.212

(Offered alternate years.)

#### **54.316 DIGITAL ELECTRONICS**

**3 semester hours**

An introduction to the techniques and devices of digital electronics. Includes practical experience of the building and testing of digital circuits. Supplies the background necessary for the understanding of microprocessors and computer circuits. Three hours class per week.

Prerequisite: Junior standing or consent of instructor  
(Offered alternate years.)

#### **54.317 COMPUTER ELECTRONICS**

**3 semester hours**

An introduction to the electronics and operation of digital computers, intended for students with a background in digital circuitry. Includes practical experience of the operation and interfacing of microprocessors and other devices. Three hours class per week.

Prerequisite: Physics 54.316 or consent of instructor  
(Offered alternate years.)

#### **54.318 OPTICS**

**3 semester hours**

Presents a combination of geometrical optics including lens theory with physical (wave) optics including diffrac-

tion, interference, polarization, lazers, and coherent light. Three hours class per week.

Prerequisite: Physics 54.212, or 54.112 with consent of the instructor  
(Offered alternate years.)

#### 54.400 ADVANCED PHYSICS LABORATORY 2 semester hours

Presents the basic tenets of lab work in physics involving considerations of experimental error, proper research, and preparation of an experiment. Includes experiments primarily from the areas of atomic physics, electricity, magnetism, and optics. Four hours per week: 1 class, 3 laboratory.

Prerequisite: Physics 54.310, 54.314  
(Offered alternate years.)

#### 54.421 SOLID STATE PHYSICS 3 semester hours

Examines physical properties of matter in the solid state. Reviews basic quantum concepts, crystal structure, electrons in metals, electrical conductivity, semiconductors, band theory and the p-n junction. Studies dielectric and magnetic properties of matter. Three hours class per week.

Prerequisite: Physics 54.310, 314; Mathematics 53.225  
(Offered alternate years.)

#### 54.422 THERMODYNAMICS 3 semester hours

Presents concepts and principles of classical thermodynamics, thermodynamics of simple systems, introduction to kinetic theory, and statistical thermodynamics. Three hours class per week.

Prerequisite: Physics 54.212, or 54.112 with consent of the instructor; Mathematics 53.225  
(Offered alternate years.)

#### 54.450 INTRODUCTION TO QUANTUM MECHANICS 3 semester hours

Introduces the fundamentals of quantum and wave mechanics beginning with a review of quantum radiation theory and progressing through the Schroedinger presentation. Includes discussion of one dimensional potential functions, the harmonic oscillator and the hydrogen atom. Three hours class per week.

Prerequisite: Physics 54.310  
(Offered alternate years.)

#### 54.480 HISTORY OF PHYSICAL SCIENCE 3 semester hours

Presents an account of the development of physical science from the time of Copernicus to the present, with attention to the nature of scientific investigation, assumptions, constructs and models, and the interaction of science with other thinking. Three hours class per week.

Prerequisite: Physics 54.112; Chemistry 52.112 or the equivalent  
(Offered alternate years.)

#### 54.490 SEMINAR IN PHYSICS

1 semester hour

A selected topic in physics is studied, and prepared in a form suitable for presentation. The student attends and participates in physics seminars and makes a presentation in the same semester as that of enrollment in the course.

#### 54.491 INDEPENDENT STUDY IN PHYSICS

1-3 semester hours

Investigates an area of special interest and value to the student under the direction of a faculty member, following a plan approved in advance by the department chairperson. May be partly interdisciplinary and may involve limited experimental work.

#### 54.493 INDEPENDENT RESEARCH

1-3 semester hours

Provides for an application of theoretical and/or experimental research methods to a special problem. May be interdisciplinary. Requires the preparation of a report. Requires a plan, approved in advance by the department chairperson, which is acceptable to the student and the supervising faculty member.

#### 54.494 HONORS INDEPENDENT STUDY IN PHYSICS

3 semester hours

Provides the qualified student with an opportunity to participate in an advanced experimental or theoretical investigation of a current problem in physics under the supervision of a physics faculty member having expertise in the student's proposed research area.

# POLITICAL SCIENCE

## Faculty

Professors Charles G. Jackson, Robert L. Rosholt (chairperson); Associate Professors Martin M. Gildea, James W. Percy; Assistant Professor Richard L. Micheri

## B.A. in Political Science

**Total Hours:** 30 semester hours

**Required Courses:** 12 semester hours, United States Government (44.120), Nations, States, and Governments (44.160), Introduction to Political Theory (44.210), and Introduction to International Relations (44.280)

**Elective Courses:** 18 semester hours, 12 of which must be upper division credits, i.e., at the 300-level or above

## Minor in Political Science

**Total Hours:** 18 semester hours.

**Required Courses:** Depends on option selected. Contact the Department of Political Science for details.

## COURSE DESCRIPTIONS

### Political Science (Code 44)

#### 44.101 ELEMENTS OF POLITICAL SCIENCE

3 semester hours

The procedures of political science to study power, the processes of politics and the practices of governments, the performance of and the pressures on the political system. For nonmajors.

#### 44.108 CONTEMPORARY POLITICAL IDEOLOGIES

3 semester hours

Presents an introduction to political ideas shaping the contemporary world: nationalism, liberalism, conservatism, capitalism, socialism, communism, and totalitarianism.

#### 44.120 UNITED STATES GOVERNMENT

3 semester hours

Introduces government and politics in the United States emphasizing constitutional development, political development, civil rights, parties, elections, pressure groups, the Congress, the president, courts, and contemporary problems such as foreign affairs, defense, inflation, unemployment, energy, and poverty.

#### 44.160 NATIONS, STATES, AND GOVERNMENTS

3 semester hours

Explores the political system's components of nation, state, and government by using the six steps of the scientific method.

#### 44.181 CONTEMPORARY ISSUES IN WORLD POLITICS

3 semester hours

Presents an introduction to international politics through an examination of such critical problems as war and peace, East-West relations, nuclear disarmament, nation-building, and revolution.

#### 44.207 ETHICS, POLITICS, AND PUBLIC POLICY

3 semester hours

Examination of normative, descriptive, and metaethical approaches employed by politicians and policymakers in confronting issues of responsibility and choice in public programs and policies. Course focuses on ethical problems and responses in civic life and emphasize the ways alternatives impact on society.

#### 44.210 INTRODUCTION TO POLITICAL THEORY

3 semester hours

An introduction to fundamental political concepts such as liberty, justice, equality, power, and authority, as well as the main ideas of some representative political philosophers from Socrates to the present.

#### 44.244 INTRODUCTION TO CRIMINAL JUSTICE

3 semester hours

Provides students with a comprehensive survey and basic understanding of the role and function of the criminal justice field. Attention is given to crime and criminal law, law enforcement, the police, court, corrections, and juvenile justice.

#### 44.280 INTRODUCTION TO INTERNATIONAL RELATIONS

3 semester hours

Examines sources of international conflict and cooperation, power politics in the international arena, problems of collective security, the settlement of disputes, diplomacy, revolution, and international law.

#### 44.303 POLITICS AND THE ARTS

3 semester hours

Surveys painting, music, films, poetry, and novels to show the relationship between these media and political concepts, philosophies, and problems.

#### 44.322 POLITICAL VIOLENCE

3 semester hours

Surveys individual, group, and mass political violence, concentrating on causes and manifestations. Studies positive and negative effectiveness of political violence with the object of placing the phenomena in meaningful historical and contemporary contexts.

#### 44.323 POLITICS AND PSYCHOLOGY

3 semester hours

Seeks to describe, explain, and analyze topics in personality and social psychology that seem relevant in under-

standing political behavior. Stresses the method to be used in gathering evidence concerning politics and psychology.

**44.324 POLITICAL SOCIALIZATION**

**3 semester hours**

Studies the process of socialization and its relation to political attitudes, values, and behaviors through socializing agents such as the family, work groups, mass media, peer groups, elementary and secondary schools. Presents this in light of political, psychological, and sociological concepts.

**44.326 PARTIES, GROUPS, AND PUBLIC OPINION**

**3 semester hours**

Examines the development of political parties in the United States; elections, voter behavior, and political participation; and the role of interest groups and political propaganda.

**44.331 LEGAL AND POLITICAL ASPECTS OF BUSINESS**

**3 semester hours**

Describes and analyzes the legal environment surrounding business, concentrating on the role of government, especially the courts, in affecting business relationships. The impact of administrative regulatory agencies and government policies, such as affirmative action, are analyzed.

**44.336 PUBLIC ADMINISTRATION THEORY**

**3 semester hours**

Includes leadership/followership and motivation/manipulation propositions on personnel management; conflict, competition, and cooperation propositions about budgeting; and information-communication propositions in relation to planning.

**44.366 POLITICAL SYSTEMS OF WESTERN EUROPE**

**3 semester hours**

Democracy as practiced in Western Europe; the politics and government of Great Britain, France, and West Germany; comparisons with the United States; principles of comparative analysis.

**44.371 POLITICAL SYSTEMS—AFRICA**

**3 semester hours**

Examines problems of newly independent states, the struggle for independence, attempts to create national unity and create political stability, economic and political development, the role of the military in politics, and politics in the Republic of South Africa.

**44.373 GOVERNMENT AND POLITICS IN CHINA AND INDIA**

**3 semester hours**

Studies politics and government in selected states with an emphasis on the forces which shape domestic and foreign politics and processes.

**44.376 GOVERNMENT AND POLITICS OF THE MIDDLE EAST**

**3 semester hours**

Introduces the political history and governments of particular states in the region and considers their interactions regionally and internationally. Course considers in particular, the importance of Islam in politics and the Arab-Israeli Conflict.

**44.405 DEVELOPMENT OF POLITICAL THOUGHT**

**3 semester hours**

A chronological survey from the ancient Greeks to the present is undertaken to present the ideas of seminal political thinkers as they grapple with perennial problems.

**44.409 AMERICAN POLITICAL THOUGHT**

**3 semester hours**

Analyzes the relationship of American political thought to contemporary political science by using traditional materials in a historical, chronological way but reworking them to show their relation and relevance to actions and institutions. Includes the main idea of the leading political thinkers in America from the colonial period to the present.

**44.412 SCOPE, APPROACHES, AND METHODS OF POLITICAL SCIENCE**

**3 semester hours**

Analyzes the various approaches and methods currently in use in political science.

**44.437 PUBLIC ADMINISTRATION APPLICATIONS**

**3 semester hours**

Readings, cases, and simulations are used and a term paper based on a government agency's data is required.

**44.438 PUBLIC PERSONNEL ADMINISTRATION**

**3 semester hours**

Public service as a career, personnel needs of national, state, and local governments, civil service law, personnel systems, and current problems.

**44.440 THE PRESIDENT AND CONGRESS**

**3 semester hours**

Reviews presidential and congressional politics, public policy-making roles, executive-legislative relationships, and constitutional issues. Examines problem areas and proposals for reform.

**44.445 PUBLIC CHOICE**

**3 semester hours**

Examines theories of committees and elections (D. Black), voting and candidates (A. Downs), constitutions (J. Buchanan and G. Tullock), public goods (M. Olson), and bureaucracy (W. Niskanen).

**44.446 CONSTITUTIONAL LAW I**

3 semester hours

Analyzes the evolution, structure, and function of the Supreme Court, concentrating on a case-study approach to the court's interpretations of the powers of the president, Congress, and federal-state relationships.

**44.447 CONSTITUTIONAL LAW II**

3 semester hours

Studies the decisions of the Supreme Court as they relate to the individual and the government, concentrating on nationalization of the Bill of Rights, rights of persons accused of crime, equal protection, and voting rights.

**44.448 THE JUDICIAL PROCESS**

3 semester hours

Studies policy-making by the federal courts, primarily the Supreme Court. The nature of the policy-making function as well as the impact of policy-making on American society also are analyzed.

**44.452 STATE AND LOCAL GOVERNMENT AND POLITICS**

3 semester hours

Presents a description and analysis of state and local legislatures, executives, and judiciaries, the myths and realities of state and local politics, intergovernmental relations, current policies, and problems.

**44.456 PUBLIC POLICY**

3 semester hours

Agenda setting by initiating issues and gate keeping by framing problems, estimating forecasts, selecting recommendations, monitoring implementation, and analyzing evaluation are the procedural considerations. Application is made to the substantive areas of redistribution, subsidy, regulation, and management.

**44.458 U.S. FOREIGN POLICY**

3 semester hours

Analyzes the substance, methods, and purposes of U.S. foreign policy including the determinants of policy, policy-making machinery, and implementation matters.

**44.463 U.S.S.R. POLITICAL SYSTEM**

3 semester hours

Studies the history, development, ideology, structure, process, institutions, and policies of the Soviet political system.

**44.464 GOVERNMENT AND POLITICS OF IRELAND**

3 semester hours

A survey of historical, social, cultural, and religious developments in Ireland with concentrated study of the government and politics of Northern Ireland and the Irish Republic. Examines contemporary literature, drama, music, and art.

**44.487 INTERNATIONAL LAW AND ORGANIZATION**

3 semester hours

Presents the theoretical and practical implications of the legal and organizational efforts to regulate international relations with emphasis on international law, the United Nations, the International Court of Justice, and regional and functional organizations.

**44.490 INDEPENDENT STUDY IN POLITICAL SCIENCE**

1-6 semester hours

Provides for individualized reading, research, and reporting under conditions of minimal supervision. Projects must have departmental approval and be underway by the end of the first week of a session.

**44.491 READINGS IN GOVERNMENT AND POLITICS**

3 semester hours

Topics are selected on the basis of close consultations between instructor and student. Designed for either group or individual study.

**44.492 SEMINAR IN GOVERNMENT AND POLITICS**

3 semester hours

Examines selected problems in government and politics in an attempt to review and unify theories and methods of political science. Emphasizes individual research projects.

**44.496 FIELD EXPERIENCE IN POLITICAL SCIENCE**

1-6 semester hours

Provides for supervised individual or group activities including internships of a non-classroom variety in applied areas of political science.

**44.497 INTERNSHIP IN POLITICAL SCIENCE**

1-15 semester hours

Provides for an on-site work experience and training program designed to give selected interns an opportunity to apply the theoretical and descriptive knowledge acquired in the classroom to the political, legal, organizational, and administrative operations of contemporary institutions.

# PSYCHOLOGY

## Faculty

Professors Donald A. Campese, Steven L. Cohen, James H. Dalton, Michael W. Gaynor, Alex Poplawsky, Constance J. Schick, J. Calvin Walker (chairperson); Associate Professors Eileen Astor-Stetson, L. Richard Larcom; Assistant Professors Ellen B. Barker, Brett L. Beck, Winona J. Cochran, John E. Waggoner

## B.A. in Psychology

A minimum of 39 semester hours in psychology as specified below:

I. *Freshman/sophomore years:*

Core courses (18 semester hours) 101, 160, 281, 282, and two courses from 211 or 212, 251, 311

Note: 281 and 282 must be taken concurrently,

II. *Junior/senior years:*

Content courses (12 semester hours)

two course from 360, 375, 380

one course from 335, 436

one course from 321, 356, 451, 453, 463, 476

one course from any Group II: content course

III. *Senior year:*

Capstone courses (6 semester hours)

two courses from 341, 401, 406, 464, 466, 497

## Minor in psychology

A minimum of 18 semester hours in psychology as specified: 101, 160 (or 40.346, 45.260, 53.141), 281, and 9 semester hours, 6 of which must be at the 300 or 400 level.

## COURSE DESCRIPTIONS

### Psychology (Code 48)

#### 48.101 GENERAL PSYCHOLOGY

3 semester hours

Studies psychology as a system of scientific inquiry into the nature and behavior of humans. Presents major concepts, principles, and processes concerned with human functioning in individuals and social settings.

#### 48.131 PSYCHOLOGY OF ADJUSTMENT

3 semester hours

Examines the personal and social meaning of adjustment. Presents an operational approach to mental health including such concepts as anxiety, frustration, conflict, aggression, and defense.

#### 48.160 BASIC STATISTICS

3 semester hours

Introduces fundamental statistical concepts and principles providing a foundation for research methodology for students who need not be mathematically inclined. Discusses computation, interpretation, and application of commonly used descriptive, correlation, and inferential statistical procedures for analyzing data.

#### 48.210 LIFE-SPAN PSYCHOLOGY

3 semester hours

Examines the psychology of human development from conception to death. Discusses traditional topics and issues in developmental psychology such as cognition and personality, but within a life-span developmental perspective.

Prerequisite: 48.101

#### 48.211 CHILD PSYCHOLOGY

3 semester hours

Studies normal development and the interrelationships among various aspects of biological, cognitive, personality, and social factors. Emphasizes prenatal to adolescent development.

Prerequisite: 48.101

#### 48.212 ADOLESCENCE

3 semester hours

Studies developmental, personal, and social issues confronting adolescents as they emerge from childhood and strive for adulthood.

Prerequisite: 48.101

#### 48.251 SOCIAL PSYCHOLOGY

3 semester hours

The study of interpersonal behavior with emphasis on affiliation, interpersonal perception and attraction, group behavior and conformity, attitude change, and compliance.

Prerequisite: 48.101

#### 48.254 PSYCHOLOGICAL ASPECTS OF SOCIAL ISSUES

3 semester hours

Examines the application of psychological theories and techniques to existing social issues and their relationship to alternative ethical viewpoints regarding social issues selected by the instructor for study.

Prerequisite: 48.101

#### 48.271 EDUCATIONAL PSYCHOLOGY

3 semester hours

Examines principles of psychology as applied to the classroom. Emphasizes learning processes as affected by environmental, experiential, and developmental factors.

Prerequisite: 48.101

#### 48.281 EXPERIMENTAL PSYCHOLOGY: METHODOLOGY

3 semester hours

Introduces experimental design, statistical analysis, and issues of control and confounding. Surveys classical

and learning experimentations as well as issues in social, developmental, educational, and clinical psychology from an experimental perspective.

Prerequisite: 48.101 and 160

**48.282 EXPERIMENTAL PSYCHOLOGY:  
APPLICATIONS**

**3 semester hours**

Surveys the application of designs and statistics to problems encountered in psychology. Addresses ethical issues in experimentation, the value of experimentation, and the limitations of research designs. Emphasizes discussion and application of various research strategies to contemporary and traditional problems in psychology.

Prerequisites: 48.101, 160, and 281 or concurrently taking 48.281

**48.311 ADULTHOOD AND AGING**

**3 semester hours**

Studies the development of adults in our culture. Includes topics on the effects of social environment on aging, special problems of aging, sex differences during adulthood, vocational, marital, and familial developments, and psychology of death and dying. Emphasizes human behavior between young adulthood and senescence with emphasis on the aging process.

Prerequisite: 48.101

**48.321 PSYCHOLOGICAL TESTS AND  
MEASUREMENTS**

**3 semester hours**

Introduces the logic of psychological measurement including the applied and practical aspects of psychological testing with emphasis on reliability, validity, and test norms. Provides student with background for test evaluation.

Prerequisite: 48.101

(Offered fall semester only.)

**48.335 ABNORMAL PSYCHOLOGY**

**3 semester hours**

Surveys the description, causation, prevention, and treatment of maladaptive behavior, as well as the ethical aspects of these issues. Considers biological, psychological, and social factors.

Prerequisite: 48.101 and junior standing

**48.341 THEORY AND PRACTICE OF ACADEMIC  
PSYCHOLOGY**

**3 semester hours**

Sharpens and expands knowledge of the basic principles of psychology. Provides an intensive review of the content taught in General Psychology and requires students to lead discussion groups.

Prerequisite: 48.101, 160, 281, 282, junior standing, and consent of the instructor

**48.356 PSYCHOLOGY OF MOTIVATION**

**3 semester hours**

Surveys the fundamental determinants of human and animal activities. Studies theories, research methodologies,

and experimental evidence related to the activation and direction of behavior.

Prerequisite: 48.101, junior standing, and 6 credits in psychology  
(Offered fall semester only.)

**48.360 COGNITIVE PSYCHOLOGY**

**3 semester hours**

Examines the major theoretical perspectives and research in the area of cognition and presents the ways in which mental processes such as memory, perception, language, and problem solving may be empirically studied.

Prerequisite: 48.101, 160, and 281

**48.375 PSYCHOLOGY OF LEARNING**

**3 semester hours**

Examines the theoretical and experimental bases of learning in animal and human behaviors. Studies situational and drive factors affecting learning, stimulus generalization, and discrimination, retention, and forgetting.

Prerequisite: 48.101, 160, 281, 282, or consent of the instructor

(Offered fall semester only.)

**48.380 PHYSIOLOGICAL PSYCHOLOGY**

**3 semester hours**

Studies the relationship between psychological processes and physiological activity. Reviews neurological and biochemical bases of behavior with emphasis on the synergistic functions of the nervous system, sense organs, and glandular system.

Prerequisite: 48.101, 160, 281, 282, or consent of instructor

(Offered spring semester only.)

**48.401 HISTORY OF PSYCHOLOGY**

**3 semester hours**

Studies the historical development of modern psychology and compares present-day models of behavior within a historical framework.

Prerequisite: 48.101 and junior standing

**48.406 PSYCHOLOGY SEMINAR**

**3 semester hours**

Provides for an advanced consideration of significant topics in psychology. Requires reports and discussions of current research and may be repeated with change in topic.

Prerequisite: 48.101 and consent of the instructor

**48.436 THEORIES OF PERSONALITY**

**3 semester hours**

A critical study of theories explaining development, structure, and organization of personality. Considers personality from psychoanalytic, social, individual, self, and learning points of view.

Prerequisite: 48.101

(Offered fall semester only.)

**48.439 INTRODUCTION TO CLINICAL PSYCHOLOGY****3 semester hours**

Surveys clinical psychology and the role of the clinical psychologist in community and hospital mental health programs, clinical assessment, and diagnosis. Examines concepts in and models of psychotherapy.

Prerequisite: 48.101, 335, or 436, or consent of the instructor

(Offered spring semester only.)

**48.451 LABORATORY TRAINING IN GROUP PROCESSES****3 semester hours**

Offers on-going experience on topics including norm-setting, leadership, problem solving, role playing, cooperation/competition, and decision making. Class size limited to 20 students.

Prerequisite: 48.101 and consent of the instructor

(Offered spring semester only.)

**48.453 ORGANIZATIONAL PSYCHOLOGY****3 semester hours**

Describes the application of psychological theory and research to the study of industrial, business, profit and non-profit service, military, and governmental organizations. Emphasizes the interaction of individual perceptions, group dynamics and organizational climates, and strategies to maximize the satisfaction and effectiveness of each component within and between complex organizations.

Prerequisite: 48.101, 251, and junior standing

(Offered spring semester only.)

**48.463 PERSONNEL PSYCHOLOGY****3 semester hours**

Surveys behavioral principles, techniques of investigation, recent research literature, and practice in the application of psychological knowledge relevant to a wide range of personnel management problems. Considers the impact of the EEO guidelines for personnel management in the areas of recruitment, selection, promotion, training, and performance appraisal.

Prerequisite: 48.101, 160, or 40.346 and junior standing (48.321 recommended)

(Offered fall semester only.)

**48.464 ADVANCED EXPERIMENTAL DESIGN****3 semester hours**

Presents an advanced consideration of the planning, conduct, and evaluation of research in the behavioral and biological sciences, employing parametric and non-parametric statistics. Emphasizes inferential statistics, design, analysis, interpretation, and computer utilization.

Prerequisite: 48.101, 160, 281, 282, or consent of the instructor

**48.466 INDEPENDENT STUDY IN PSYCHOLOGY****3 semester hours**

Provides for the study of a topic via review and research of technical psychological literature or empirical manipulation of variables in the field or laboratory under supervision of a psychology faculty member. Results in a written report.

Prerequisite: Consent of the instructor and departmental approval

**48.476 PRINCIPLES OF BEHAVIOR MODIFICATION****3 semester hours**

Studies the application of learning principles to change behavior in both individual and group settings.

Prerequisite: 6 credits in psychology

**48.497 PRACTICUM IN PSYCHOLOGY****1-15 semester hours**

Provides application of psychological knowledge through study, observation, and practice in a community, college, or business setting. May be repeated for a total of 15 semester hours.

Prerequisite: Consent of the instructor

# **SOCIOLOGY and SOCIAL WELFARE**

## **Faculty**

Professors James H. Huber, Frank Lindenfeld, Chang Shub Roh; Associate Professors Christopher F. Armstrong, Leo G. Barrile, Thomas A. Bonomo, David E. Greenwald, I. Sue Jackson (chairperson), Charles W. Lauderhilch, Anne K. Wilson; Assistant Professor Dale L. Sultzbaugh

The department offers a B.A. in sociology, a B.A. in social welfare, and an option in criminal justice within either degree program. A description of the B.A. in social welfare appears on page 115.

### **B.A. in Sociology**

Required courses for a major in sociology are 45.211, 45.260, 45.462, and 45.466. Students select six courses from those courses listed below in consultation with their advisers.

#### **COURSE DESCRIPTIONS**

##### **Sociology and Social Welfare (Code 45)**

#### **45.211 PRINCIPLES OF SOCIOLOGY**

**3 semester hours**

This course introduces the student to basic concepts, theories, and perspectives in sociology. Sociology is the scientific study of the influence of groups, institutions, and cultures upon individuals. For example, the extent to which race, gender, class, religion, and education affect the behavior and opportunities of individuals is probed.

#### **45.213 CONTEMPORARY SOCIAL PROBLEMS**

**3 semester hours**

Examines social issues such as plant closings and unemployment, the impact of multinational corporations on the economy and the environment, mobility, aging, family problems—sex roles, abuse, incest, divorce, alcohol and drug abuse, social change and disorganization, racism, sexism, employment discrimination, crime, alienation, and poverty.

#### **45.215 RACIAL AND NATIONAL MINORITY GROUPS**

**3 semester hours**

Presents a sociological examination of some of the major racial, ethnic, and religious minorities and their divergent heritages in the contemporary American scene.

Prerequisite: 45.211

#### **45.216 URBAN SOCIOLOGY**

**3 semester hours**

Presents a sociological analysis of origin and growth of cities with an emphasis on the dynamic patterns of social interaction in the changing contemporary urban scene. Cities are viewed mainly from a multinational perspective with a special focus on urban regions.

Prerequisite: 45.211; consent of the instructor

#### **45.219 RELIGION AND SOCIETY**

**3 semester hours**

Examines religion as a means by which people, as members of communities, order their lives and endow them with meaning. Topics include ritual and belief systems, the social organization of religion, and the relationship between religion and other parts of the social structure.

Prerequisite: 45.211

#### **45.231 MARRIAGE AND THE FAMILY**

**3 semester hours**

Provides a sociological examination of the traditional and changing institutions of marriage and the family in contemporary society. Focuses on family and marital interaction, roles, and interpersonal familial relations.

#### **\*45.242 JUVENILE DELINQUENCY**

**3 semester hours**

Examines social pressures operative upon children in American society, which leads to formation of delinquent personality. Consideration of treatment and prevention, juvenile courts, clinics and correctional institutions, evaluation of theories, concepts, and relevant empirical research.

#### **\*45.244 INTRODUCTION TO CRIMINAL JUSTICE**

**3 semester hours**

Offers a comprehensive survey and basic understanding of the role and function of the criminal justice field. Attention is given to crime and criminal law, law enforcement and the police, courts, corrections, and juvenile justice.

#### **45.260 BASIC SOCIAL STATISTICS**

**3 semester hours**

Presents principles and techniques of statistical analysis used by sociologists and others in social sciences: descriptive tables and graphs, measures of dispersion, significance tests, correlation, \*\* and regression. Students collect and analyze data using computers. Emphasis on understanding concepts underlying statistical analysis in order to permit intelligent use and interpretation of statistics.

#### **45.276 SCIENCE AND SOCIETY**

**3 semester hours**

Explores science as the organized activities of an occupational community. Examines the development of science as an institution, its social organization in modern society, and its internal and external politics.

Prerequisite: 45.211

**45.318 SOCIAL STRATIFICATION****3 semester hours**

Examines the role of social class in terms of structure, function, and persistence in any society. Examines classical theoretical statements and evaluates current American class relations in terms of status, power, authority, and social mobility. Covers notable studies of the American class system and provides a close look at power relations and styles of life among the various American classes.

Prerequisite: 45.211

**\*45.341 CRIMINOLOGY****3 semester hours**

Discusses the major sociological theories of crime and justice. Presents the scope of crime in the United States and other countries. Probes each major type of crime, namely, homicide, rape, white-collar crime, political crime, organized crime, property crimes, drug crimes, prostitution, and pornography. Describes and analyzes law enforcement system.

Prerequisite: 45.211

(Offered fall semester only.)

**\*45.342 PENOLOGY****3 semester hours**

Penology studies the social rationales, methods, and consequences of punishing and rehabilitating law breakers. Includes a social history of prisons, jails, and punishment, the interpersonal dynamics within the institution, the inmate social order, causes of riots, treatment programs, and alternative models and policies.

Prerequisite: 45.211

(Offered spring semester only.)

**\*45.343 VICTIMOLOGY****3 semester hours**

Victimology examines the short-term and long-term effects of victimization on individuals and groups from such crimes as family violence, rape, street crime, business fraud, corporate negligence, and political wrongdoings.

Prerequisite: 45.244

(Offered spring semester only.)

**45.345 MEDICAL SOCIOLOGY****3 semester hours**

Course facilitates the student's ability to understand, analyze, and evaluate sociological factors in relation to illness, medical behavior, and health care systems.

Prerequisite: 45.211 or consent of the instructor

**45.400 SOCIOLOGY OF MASS COMMUNICATION****3 semester hours**

Course is an in-depth discussion of the cognitive and behavioral affects of mass media, especially television on audiences, the social structure of the communications industry, particularly its influence on media content, and the political use of mass media. Students critique latest research articles in the field.

Prerequisite: 45.211 and junior status

**45.441 SOCIAL INDICATORS****3 semester hours**

Attempts to reinforce and extend earlier learning in research techniques and methods by focusing upon systematic, step-by-step understanding, analysis, and preparation of social indicators at the federal, state, and local levels of social policy planning. Promotes understanding of social indicators and the use of these indicators within all levels of society.

**45.443 SOCIOLOGY OF DEVIANT BEHAVIOR****3 semester hours**

Evaluates the presence and function of deviance in society. Includes mental illness and various types of crime and stigmatized behavior. Examines how it is handled therapeutically and legally through institutionalization and treatment. Attempts to provide a broad theoretical perspective as well as concrete examples of deviance in any society. Examines current methods of rehabilitation and punishment.

Prerequisite: 45.211

(Offered fall semester only.)

**45.457 SOCIOLOGY OF COMMUNITY****3 semester hours**

Reviews and examines theories and research of communities. The system approach to understanding the American community will be given special emphasis.

Prerequisite: 45.211

**45.462 SOCIOLOGICAL THEORY****3 semester hours**

Course examines classical forms of social theory from the 19th century and their impact on the development of theory in the 20th century. Max Weber, Emile Durkheim, and Karl Marx are studied regarding their views on the social structure, social organization, economy, and human condition as well as their influence on contemporary perspectives, namely, the conflict and functional approaches, sociology of knowledge, phenomenological sociology, and symbolic interactionism.

Prerequisite: 45.211

**45.465 COMPUTER APPLICATIONS IN THE SOCIAL SCIENCES****3 semester hours**

Presents an introduction to computer use for the social sciences (through the use of SPSS). Emphasizes translating questions into data analysis and interpretation of statistical results.

Prerequisite: 45.260 or similar statistics course

(Offered spring semester only.)

**45.466 SOCIAL RESEARCH****3 semester hours**

Course stresses design and construction of major research methods and procedures used in social research. Special emphasis placed on survey research.

Prerequisite: 45.211, 260, or consent of the instructor

**45.467 POPULATION PROBLEMS****3 semester hours**

Studies human population, its major theories, distributions, composition, characteristics, changes, and future developments of population and impacts of population problems on society as influenced by vital processes.

Prerequisite: 45.211

**45.468 SOCIAL SERVICE PLANNING****3 semester hours**

Provides an advanced consideration of the social context and the development of social policy and planning. Stresses the implementation of social and/or human services at federal, state, and local levels of organization. A critical analysis of the effects of social policy, planning, and services on people in a service-oriented, post-industrial society.

Prerequisite: 45.211 and consent of the instructor  
(Offered summer only.)

**\*45.470 SENIOR SEMINAR****3 semester hours**

Provides for individual research projects and reports within selected areas of interest such as the family, criminology, social services, and special populations.

Prerequisite: 18 hours of sociology and social work and consent of the instructor. Open to seniors only.

(Offered spring semester only.)

**45.471 INDEPENDENT STUDY IN SOCIOLOGY****3 semester hours**

Allows student to pursue individualized instruction in-depth with a faculty member in a specific area of the field not covered in current courses.

Prerequisite: 45.211, 260, 462, 466, and consent of the instructor, chairperson, and members of the department.  
(See section on Preprofessional and Career Advisement.)

**45.474 CONTEMPORARY ENVIRONMENTAL ISSUES****3 semester hours**

Examines some major human problems that lead to environmental deterioration, particularly water, air, and noise pollution, energy and other resource depletion, and increasing population density.

Prerequisite: 45.211

**45.477 COMMUNITY LAND USE PLANNING****3 semester hours**

Introduces the community planning process and the theoretical perspectives relevant to community land use planning. Examines selected substantive planning problem areas in the local community. Students formulate, develop, and present a community land use plan.

Prerequisite: 45.211

(Offered fall semester and summer only.)

**45.478 SOCIOLOGY OF WORK****3 semester hours**

Presents a sociological examination of work and the milieu of the worker. Studies formal and informal work

organizations, job satisfaction and dissatisfaction, the structure and organization of industrial and post-industrial societies, and the relationship between work organizations within communities and society.

Prerequisite: 45.211

(Offered spring semester only.)

**45.490 SOCIOLOGY OF AGING****3 semester hours**

Studies aging, its major theoretical themes, patterns of living, socio-psychological, and cultural consequences. Examines the contemporary issues, problems, and programs of the aging.

Prerequisite: 45.211

**\*45.496 SOCIOLOGY INTERNSHIP PROGRAM****1-15 semester hours**

Designed primarily for the junior or senior working in a specific institutional field and/or college-approved, off-campus activities related to student's chosen professional field.

Prerequisite: Consent of the instructor and department chairperson

**B.A. in Social Welfare**

The Department of Sociology and Social Welfare offers a major in social welfare and is accredited by the Council on Social Work Education. The primary program objective is to prepare students for the beginning level of professional social work practice with individuals, families, groups, organizations, and communities.. The curriculum integrates basic social work knowledge with a liberal arts perspective.

**Required Courses:** Social Welfare 45.133, 297, 334, 450, 452, 453, 497, 498; sociology 45.211, 215, 260, 462, 466

General Biology 50.101, Principles of Economics 40.211, U.S. Government 44.120, General Psychology 48.101, Life Span Psychology 48.110, and three other credits in psychology.

For additional information about admissions criteria and course sequence, please see the director of the social welfare program, Dale L. Sultzbaugh.

\*\*Courses that are not in the social welfare degree program.

**45.133 INTRODUCTION TO SOCIAL WORK AND SOCIAL WELFARE****3 semester hours**

Provides an orientation to the profession of social work and the field of social welfare. Includes an examination of historical and current social work processes, values, and practices in various settings and with special population groups.

**\*\*45.236 CHILD WELFARE****3 semester hours**

Examines child welfare services, issues, and the institutions which affect the social functioning of children.

**45.297 INTRODUCTORY PRACTICE EXPERIENCE IN SOCIAL WELFARE****3-6 semester hours**

Exploratory practice experience for students considering a social welfare major. Provides an overview of the agency system under the direction of a practice supervisor.

Prerequisite: 45.133

**45.334 SOCIAL WORK PROCESSES I****3 semester hours**

Examines several orientations to problem solving with individuals and families. Emphasis is on the essential knowledge, values, and interviewing skills for beginning social work practice.

Prerequisites: 45.133, 211, 215, 297; and 48.101, 110; and 50.101

(Offered fall semester only.)

**45.450 SOCIAL WORK PROCESSES II****3 semester hours**

Utilizes problem-solving interventions in small groups integrating social work knowledge, skills, and values.

Prerequisites: 45.133, 211, 215, 297; taken concurrently with 45.334 or after and 48.101 and 110 and 50.101

(Offered fall semester only.)

**\*\*45.451 FAMILY COUNSELING****3 semester hours**

Course surveys major theoretical models for family assessment and intervention with primary emphasis on ecological systems. Working knowledge of rudimentary assessment and intervention skills for problem solving with families acquired.

**45.452 SOCIAL WORK PROCESSES III****3 semester hours**

Examines problem-solving interventions with large groups, communities, and organizations using the conceptual framework of social work knowledge, skills, and values.

Prerequisites: 40.211 and 44.120 and 45.133, 215, 297, 334, 450, and 48.101 and 110

(Offered spring semester only.)

**45.453 SOCIAL WELFARE POLICY****3 semester hours**

Frameworks for analyzing social and economic policies will be presented with special focus on legislative, judicial, and administrative policies.

Prerequisites: 40.211 and 44.120 and 45.133, 215, and 297 (or concurrently)

(Offered spring semester only.)

**45.497 SOCIAL WELFARE INTERNSHIP****10-15 semester hours**

Provides the social welfare major with the opportunity to integrate and apply knowledge, theory, and understanding extracted from the foundation courses. The internship experience fosters skill development and evaluates the demonstration of beginning competencies in working with individuals, families, groups, organizations, and communities.

Prerequisite: 40.121; 45.133, 297, 334, 450, 452, 453, 215, and 48.110; 44.120 and 45.466 may be taken concurrently

**45.498 INTEGRATIVE METHODS SEMINAR IN SOCIAL WORK AND SOCIAL WELFARE****3 semester hours**

An examination of social work practice from a system theory perspective and its functional relevance to contemporary social problems. Internship and other practice experiences will be critical elements in this review course. This course is taken concurrently with or after the social welfare internship.

Prerequisites: 40.211; 44.120; 45.133, 297, 334, 450, 452, 453, 215, 466, and 48.110; 45.497 and 45.466 may be taken concurrently

(Offered spring semester only.)

**Criminal Justice Option**

Option is designed for students interested in a career in criminal justice. Students will be exposed to the adult corrections, juvenile justice, law enforcement, and penal systems.

**Required Courses:** 45.211-Principles of Sociology, 45.260-Basic Social Statistics, 45.462-Sociological Theory, 45.466-Social Research, 44.244 or 45.244 Introduction to Criminal Justice, 45.242 Juvenile Delinquency, 45.341 Criminology, 45.342 Penology, 45.343 Victimology, 45.496 Sociology Internship Program, and three of the following courses:

- 45.133 Introduction to Social Work and Social Welfare
- 45.334 Social Work Processes I
- 45.215 Racial and National Minority Groups
- 45.213 Contemporary Social Problems
- 45.443 Sociology of Deviant Behavior
- 45.216 Urban Sociology

## ***COLLEGE OF BUSINESS***

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*Carol J. Matteson, dean,  
College of Business*



# **COLLEGE OF BUSINESS**

The College of Business consists of five departments: Accounting, Computer and Information Systems, Finance and Business Law, Marketing and Management, and Business Education/Office Administration. The college offers curricula in business administration with six concentrations as well as computer and information science, business education with four options for certification, and office administration.

The curriculum in business administration prepares students for beginning positions in business; computer and information science provides skills in applications systems and programming; the business education program leads to certification as a teacher of business subjects; and the curriculum in office systems prepares students for the administration and management of a business office.

Students enrolled in other colleges within the university who wish to transfer to a business curriculum must have completed a minimum of 15 semester hours of credit at Bloomsburg and have earned a cumulative quality point average of 2.5 or higher to be eligible to apply. Admission to the College of Business, however, is selective.

## ***Programs and Major Specializations***

### **Degree**

**Business Administration.....** B.S. in Business Administration

Specialization: Accounting  
Economics  
Finance  
Information Processing  
Management  
Marketing

**Business Education.....** B.S. in Education

Certification: Accounting  
Data Processing  
Marketing  
\*Office Technologies

**Computer and Information Systems.....** B.S. in Computer Information Science

**Office Systems.....** B.S. in Office Administration

\* Required for all majors

# **Business Administration**

## **Faculty**

### **Accounting Department**

Professors Robert P. Yori (chairperson), Richard Baker; Associate Professors Charles M. Bayler, Lester J. Dietterick, E. Burel Gum, Young Kim; Assistant Professors John E. Dennen, Richard McClellan

### **Computer and Information Systems Department**

Professor Frank S. Davis Jr.; Associate Professors Harold K. Frey (chairperson), Charles J. Hoppel; Assistant Professors Patricia M. Boyne, John E. Hartzel

### **Finance and Business Law Department**

Professors Barbara E. Behr, Bernard C. Dill; Associate Professors Raj Guttha, David G. Heskel (chairperson), Bruce Rockwood; Assistant Professor Karen Elwell

### **Marketing and Management Department**

Professors Alan D. Carey, Peter B. Venuto, Melvyn L. Woodward; Associate Professors Stephen S. Batory, Charles M. Chapman (chairperson), Francis J. Gallagher, Howard J. Kinslinger, Robert N. Watts Jr.; Assistant Professor Salim Qureshi.

### **Degree**

The degree, Bachelor of Science in Business Administration, is conferred upon completion of the business administration curriculum.

## **Program Objectives**

The curriculum in business administration develops specialized knowledge and skills applicable to entry into the business world and provides the opportunity to prepare for advanced studies in business. To achieve these aims, the curriculum is dedicated to those educational ideals that increase the student's understanding of business practices, develop specialized occupational skills, and enhance analytical and scholarly development. The business person's role and the place and purpose of the business firm in society are matters for constant study and evaluation. A concern for personal development in the attributes of intellectual discipline and ethical values is integrated into the general education and business courses.

**Note:** Courses listed in this catalog as experimental may only be offered by academic departments twice, and not necessarily in consecutive semesters.

## **Curriculum Requirements**

The curriculum in business administration requires the successful completion of five sets of courses:

**A. General Education:** (See the section on General Education Requirements.)

**B. Core Courses:** Economics 40.211, 212, 346; Economics 40.246 or Mathematics 53.123; Mathematics 53.118; Accounting 91.220 or Accounting 91.221 for Accounting and CIS majors; Accounting 91.223; Information Processing 92.150; Management 93.344, 445, and 446; Finance 96.313; Marketing 97.310; Business Law I 98.331

**C. Specialization** in one of the following areas:

### **ACCOUNTING**

Accounting: 91.222, 91.321, 322, 323, 324, 342, 348  
Business Law II: 98.332

Accounting majors entering as freshmen will encounter extensive work with microcomputer applications in their accounting courses. The faculty, therefore, highly recommends that students own or have ready access to an MS-DOS based microcomputer for regular use. The College of Business does not specify any one brand of microcomputer but can provide information on microcomputer requirements and a special computer purchase program through the college's Computer Purchase Program coordinator.

### **BUSINESS ECONOMICS**

Economics: 40.311, 312, 313; 422 or 423, plus 3 credits of 40 prefix electives and credits of Business Administration electives.

### **FINANCE**

96.323, 343, 454, and 6 credits from 96.333, 413, 423, 463, and 473

### **INFORMATION PROCESSING**

92.177, 252, 256, 351, 352, and 6 credits from 92.254, 350, 354, 356, 358 or 450 or 456

### **MANAGEMENT**

Information Processing: 92.254  
Management: 93.345, 449, 457, and 3 credits of a business elective

### **MARKETING**

97.360, 370, 430, 440, 460, 490, and a 3 credit marketing elective.

**D. Elective Courses** to complete a minimum of 63 semester hours in business and economics: elective courses are designated with a 91, 92, 93, 96, 97, 98 prefix for business courses and a 40 prefix for economics courses. Additional courses permitted as electives include: Speech, 25.307; History, 42.223 (a substitute for 42.224 and 40.423), 472; and Business, 90.101, 241, 431, 432.

Note: 90.101 will not be allowed for credit as a business elective once a student has completed 6 credits in business administration courses. *In selecting an elective, the student is reminded to have the proper prerequisites and to avoid elected courses below that level for which the student has already been prepared in that subject field.*

**E. Free Electives:** As required to meet the total 128 semester hours graduation requirement.

## **Computer and Information Systems**

The degree, Bachelor of Science in Computer and Information Science (CIS), is conferred upon successful completion of the computer and information systems curriculum.

Students enrolled in other colleges within Bloomsburg University who wish to transfer to the CIS curriculum must have completed a minimum of 15 semester hours of credit at the university and have earned a cumulative quality point average of 2.5 or higher to be eligible to apply. Consideration for admission to the computer and information systems program, however, is selective, and applications are reviewed with the Office of Academic Advisement during mid-semester only.

### **Program Objectives**

The program's first objective is to provide a broad educational base for intelligent citizenship. Required core courses provide a breadth of knowledge in the computer and information processing field. Each student majoring in the program is able to select courses, with the guidance of an adviser, that accomplish one or more of the following purposes:

- Prepares graduates for positions in the computer industry.
- Provides specific marketable skills in business and scientific computing applications.
- Prepares graduates for advanced degree study in computer-related fields.

### **Curriculum Requirements**

**A. General Education:** (See the section on General Education Requirements.)

**B. Core Courses:** Two from the following: Mathematics 53.118, 123, 125, 126 (the combination of 53.123 and 53.125 does not satisfy this requirement), and either

53.141 or 53.241; Economics 40.211; Accounting 91.221 and 222; Information Processing 92.150, 177, 252, 256, 350, 351, 352, and 354

**C. Specialization:** 15 semester hours in restricted electives in computer and information science courses chosen through consultation with an adviser

**D. Elective Courses:** 12 semester hours from business and selective mathematics courses chosen through consultation with an adviser

**E. Free Electives:** As required to meet the total 128 semester hours graduation requirement

## Business Education and Office Administration

### Faculty

Associate Professors Ellen M. Clemens, Nancy A. Dittman, Roger W. Ellis, Jack L. Meiss, John J. Olivo Jr. (chairperson); Assistant Professors Donna J. Cochrane, Dennis O. Gehris, Janice C. Keil

### B.S. in Education

The Bachelor of Science in Education is conferred upon successful completion of the business education curriculum.

### Program Objectives

The business education curriculum provides specialized knowledge and skills to prepare graduates for: certification for secondary and postsecondary teaching; positions as training managers for business and government; and advanced study in business education and related fields

### Admission

Students who are admitted as business education majors must apply for acceptance into teacher education upon completion of 32 or more credits and a 2.5 grade point average. The curriculum offers four options for business teacher certification.

### Certification

Upon completion of the curriculum, recommendation of the university, and the passing of the Pennsylvania State Certification Test, the Pennsylvania Department of Education issues an Instructional Level I certificate. Every certificate includes office technologies in addition to at least one other area of certification; no certificate is issued bearing only one certification area.

## Curriculum Requirements

The curriculum in business education requires completion of four sets of courses.

**A. General Education:** (See the section on **General Education Requirements**.) Composition 20.101 and 201, Speech 25.103; Quantitative 40.346 Business and Economics Statistics I or 53.118 Matrix Algebra; Economics 40.211, 212; Psychology 48.101; Introduction to Exceptional Individuals 70.101; Introduction to Statistics 53.141; additional requirements include 3 semester hours in values; 3 semester hours in physical education; 12 semester hours in humanities; and 9 semester hours in natural sciences and mathematics.

**B. Business Core Courses:** General Business 90.101, 241, and 333; Accounting 91.221; Information Processing 92.150; Office Systems 94.221, 302, 401, and 403; Business Law 98.331. Restricted Business Electives—students must choose at least 3 semester hours from the following courses: General Business 90.234 and Office Systems 94.330, 405

**C. Business Education Certification Areas:** The student chooses one of the following areas of certification in Business Education:

**ACCOUNTING** (Accounting 91.222, 223, and 321);

**OFFICE TECHNOLOGIES** (Office Systems 94.221 and 302) Required for all majors;

**DATA PROCESSING** (Information Processing 92.177, 251, and one additional course from information processing);

**MARKETING** (Marketing 97.310 and two courses from the following: Management 93.344, Marketing 97.430, Business Law 98.332);

**D. Professional Education Requirements:** The student must have completed the following courses to be considered for certification as a teacher of business subjects:

Educational Foundations	10 semester hours
60.201, 251, 291, 393	
Secondary Education 65.374	3 semester hours
General Business 90.402	3 semester hours
General Business 90.404	12 semester hours
General Business 90.406	3 semester hours
Business Education Field Experience 90.403	1 semester hours

### B.S. in Office Administration

The Bachelor of Science in Office Administration is conferred upon completion of the office systems curriculum.

## **Program Objectives**

The office systems curriculum prepares students for careers requiring a broad business background and office systems knowledge and skills necessary to manage human resources, technology, and procedures. The curriculum focuses on the impact of technology on the end user.

## **Curriculum Requirements**

The curriculum in office systems requires the completion of the following five sets of courses:

**A. General Education:** (See section on General Education Requirements.) Composition 20.101, 201; Speech 25.103; Quantitative 40.346 or 53.141; Economics 40.211, 212; 53.118. Additional requirements include 3 semester hours in values; 3 semester hours in survival; 12 semester hours in humanities; 9 semester hours in natural sciences and mathematics; and 6 semester hours in social and behavioral sciences.

**B. Office Administration Required Courses:** General Business 90.101, 333; Accounting 91.220 (or 221 and 222), 223; Information Processing 92.150; Management 93.344, 446, 449; Finance 96.313; Marketing 97.310; Business Law 98.331, 332.

**C. Office Systems Core Requirements:** Office Systems 94.221, 302, 330, 401, 403, 405.

**D. Business Electives:** Students must choose 9 to 12 hours from the prefixes 90-98

**E. Free Electives:** Students must choose 8 hours in free electives

## **COURSE DESCRIPTIONS**

### **General Business (Code 90)**

#### **90.101 INTRODUCTION TO BUSINESS**

**3 semester hours**

Provides a study of business and its environment, organization, operation, and interrelationships with government and society. Students majoring in business develop a broad base for further study in a specific area in business, while other majors will become familiar with the American enterprise system and the functions and issues facing business today.

Prerequisite: Freshman or sophomore standing

#### **90.234 BUSINESS MATHEMATICS**

**3 semester hours**

Covers concepts and principles of basic business operations and mathematics as it relates to accounting, retailing, and finance.

Prerequisite: Freshman or sophomore standing  
(Offered spring semester only)

#### **90.241 PRINCIPLES OF SELLING**

**3 semester hours**

Includes a study of selling as a profession, preparation for successful selling, steps and procedures associated with the sales process, and special selling topics. Requires students to apply sales principles and techniques while conducting in-class sales presentations.

Prerequisite: Freshman or sophomore standing or the approval of the instructor

#### **90.333 BUSINESS COMMUNICATIONS AND REPORT WRITING**

**3 semester hours**

Applies theories and principles of effective communication to the solving of common business problems. Psychological and organizational strategies are used in the writing of business reports and other documents. Use of microcomputer software encouraged.

Prerequisite: Junior or senior standing

#### **90.402 METHODS OF TEACHING BUSINESS EDUCATION**

**3 semester hours**

Emphasizes a variety of methods and materials for teaching all areas of business education certification. Schedule concurrently with 90.403. Must be scheduled the semester prior to student teaching.

#### **90.403 BUSINESS EDUCATION FIELD EXPERIENCE**

**1 semester hour**

Course is designed to initiate an awareness of the teaching and learning atmosphere of the professional teacher in the classroom. Students provided opportunities to undertake the responsibilities assigned to a classroom teacher as well as assuming some of the teaching role competencies. Must be scheduled the semester prior to student teaching.

#### **90.404 PROFESSIONAL SEMESTER IN BUSINESS EDUCATION**

**12 semester hours**

Includes orientation experiences to observe the operation of a school and specific classes as well as 16 weeks of participatory teaching experiences correlated with classroom studies under full-time supervision. Must be scheduled concurrently with clinical studies in business education 90.406.

#### **90.406 CLINICAL STUDIES IN BUSINESS EDUCATION**

**3 semester hours**

Presents seminars on principles of education for business teachers, methods of teaching business subjects, strategies, and problems of classroom teaching. Classroom discussions are closely correlated with the experiences of the Professional Semester in Business Education 90.404.

**90.410 SPECIAL TOPICS IN BUSINESS EDUCATION AND OFFICE SYSTEMS**  
1-3 semester hours

A study of the aspects of business education or office systems. Not available as a regular course offering.

**90.431 INDEPENDENT STUDY IN BUSINESS**  
1-3 semester hours

Topic and outline of project must be approved by the department chairperson and dean of the college.

Prerequisite: Open to seniors only

**90.432 INTERNSHIP IN BUSINESS**  
3 semester hours

Provides students with opportunities to acquire practical experiences in work situations in office systems.

Prerequisite: Approval by department chairperson; grade point average of 2.75 and 80 credits earned

**90.460 BUSINESS AND OFFICE WORKSHOP**  
1-3 semester hours

Seminar on educational ideas and experiences. Students acquire an awareness and understanding of the knowledge pertaining to development and improvement of business skills, the enhancement of business and office education as a professional responsibility, and their role in the businessworld.

Accounting  
(Code 91)

**91.220 FINANCIAL ACCOUNTING**  
3 semester hours

Familiarize students with a basic understanding of the generally accepted accounting principles as they affect management. Includes sole proprietorships, partnerships, and corporate accounting. For nonaccounting majors only.

**91.221 PRINCIPLES OF ACCOUNTING I**  
3 semester hours

Presents the accounting cycle covering both service and merchandising activities of a sole proprietorship; special journals and special ledgers, accrued and deferred items, and development of an understanding of a voucher system.

**91.222 PRINCIPLES OF ACCOUNTING II**  
3 semester hours

Develops further the accounting cycle; recording, summarizing, and interpreting financial data for partnerships and corporations; development of an understanding of the voucher system.

Prerequisite: 91.220 or 91.221 and 92.150

**91.223 MANAGERIAL ACCOUNTING**  
3 semester hours

Presents profit planning, cost behavior, budgeting, decision making, responsibility accounting, division performance measurement, control and evaluation of cost centers, quantitative methods, statement of cash flows, and analysis of financial statements.

Prerequisite: 91.220 or 222 and 92.150

**91.321 INTERMEDIATE ACCOUNTING I**  
3 semester hours

Outlines the preparation of financial accounting statements with emphasis on accounting standards regarding present value concepts, cash, temporary investments, receivables, inventories, property, plant, equipment, intangibles, and current liabilities.

Prerequisite: 91.222

**91.322 INTERMEDIATE ACCOUNTING II**  
3 semester hours

Presents standards of good accounting practice with emphasis on noncurrent items, provides solutions and discussion of various contemporary accounting problems, detailed analysis of major financial statements of business organizations.

Prerequisite: 91.321

**91.323 INTERMEDIATE ACCOUNTING III**  
3 semester hours

Presents analysis of accounting standards applicable to leases, interim reporting, income recognition, EPS, statement of cash flows, inflation, real estate, franchises, and foreign operations.

Prerequisite: 91.322

**91.324 FEDERAL TAX ACCOUNTING**  
3 semester hours

Introduces basic tax laws pertaining to preparation of individual federal tax returns and supporting schedules. Emphasis on tax law research utilizing federal tax services and contemporary professional literature.

Prerequisite: 91.321

**91.342 AUDITING THEORY AND PROCEDURE**  
3 semester hours

Outlines principles, standards, procedures, and techniques applicable to internal and public auditing; consideration of the audit report and development of working papers for preparation of the report.

Prerequisite: 91.322, 92.150, and 40.346

**91.348 COST ACCOUNTING**  
3 semester hours

An in-depth study of the three major production costs—raw material, labor, and factory overhead—for a job order cost system.

Prerequisite: 91.321

**91.424 ADVANCED FEDERAL TAX ACCOUNTING**  
3 semester hours

Assigns group and individual projects selected from the following areas of advanced tax accounting; partnerships and corporations, Pennsylvania corporate taxes, estates and trusts, reporting to governmental agencies. Includes lectures, discussion of issues, and practice in the solution of problems.

Prerequisite: 91.324

**91.430 ADVANCED ACCOUNTING I****3 semester hours**

Applies accounting principles to special problems in the consolidation and merger of business enterprises. Includes consideration of the basis for such combinations, consolidated statements on date of acquisition as well as at subsequent dates, and foreign branches and subsidiaries.

Prerequisite: 91.322

**91.431 ADVANCED ACCOUNTING II****3 semester hours**

Applies accounting principles of special problems found in fiduciary relationships, governmental and institutional units and actuarial science. Emphasizes bankruptcy, estates and trusts, government funds, and nonprofit service organizations.

Prerequisite: 91.321 or consent of the instructor

**91.432 INTERNSHIP IN ACCOUNTING****3 semester hours**

Work experience in the accounting profession.

**91.448 ADVANCED COST ACCOUNTING****3 semester hours**

Continuation of 91.348 concentrating on process cost, standard cost, and budgets. Emphasis on methods used to analyze and interpret cost data.

Prerequisite: 91.348

**91.449 CPA PROBLEMS****3 semester hours**

Addresses the application of procedures for the solving of a cross section of complex accounting problems and the discussion of theory and practice.

Prerequisite: 91.324, 342, and 348, senior standing, and consent of the instructor

**Computer and Information Systems  
(Code 92)**

**92.150 INTRODUCTION TO COMPUTER AND INFORMATION SCIENCE****3 semester hours**

Introduces the use of the computer for problem solving and processing of commercial information. Includes a study of hardware and software concepts, systems, commercial applications, and data communications. "Hands on" experience with word processing, spreadsheet, and file management software is required using MS-DOS microcomputers.

**92.177 STRUCTURED PROGRAMMING METHODOLOGY****3 semester hours**

Course is designed to develop the skill and knowledge necessary to solve commercial problems using a computer and investigates software tools used within the CIS curriculum. A basic understanding of data representation, data structures, control structures, structured programming, algorithm development, and computer concepts studied. Programming

experiences required using PL/I as a high-level language and the UNIX operating system.

Prerequisite: 92.150 or equivalent

**92.251 MINI/MICRO PROGRAMMING SYSTEMS****3 semester hours**

A survey of the minicomputer and microcomputer capability available to the small business. Focuses on business applications and system design considerations applicable to Mini/Micro Programming Systems. Programming experiences appropriate to the Mini/Micro environment required with emphasis on BASIC language, Dbase, and MS-DOS. PC networks will be explored.

Prerequisite: 92.150 or equivalent

**92.252 BUSINESS ORIENTED PROGRAMMING****3 semester hours**

Familiarizes students with COBOL language and seeks to develop their ability to use COBOL as an effective problem-solving language. Students define, write, test, debug, and document several COBOL problems.

Prerequisite: 92.177 or 53.177

**92.254 MANAGEMENT INFORMATION SYSTEMS****3 semester hours**

A study of how computer-based information systems provide information for effective decision making. The data base concept data entry, operator-machine interaction, data retrieval concepts also are presented from the management view.

Prerequisite: 92.150, 91.220 or 221

**92.256 DATA AND INFORMATION STRUCTURES****3 semester hours**

Studies logical and physical operations in applications with character strings, linked lists, graphs, and trees emphasizing techniques and mechanics of programming using UNIX environment and PL/I as a high-level language. Includes a study of file structure and data base concepts.

Prerequisite: 92.252 or 53.271

**92.350 ANALYTICAL COMPUTING CONCEPTS****3 semester hours**

A detailed development of the C programming language and programming techniques appropriate to the UNIX environment presented. Data representation, code generation, and programming considerations related to file maintenance with UNIX and C explored and developed through actual programming experiences.

Prerequisite: 92.256 or 53.277

**92.351 SYSTEMS ANALYSIS AND DESIGN****3 semester hours**

Delineates basic systems analysis and design, forms design, data collection, data files, file maintenance, systems flow-charting, integration of systems, feasibility studies, systems implementation, and documentation.

Prerequisite: 92.256

**92.352 ADVANCED PROGRAMMING****3 semester hours**

Presents advanced concepts of programming in COBOL with major emphasis on table handling, Index Sequential Files, subroutine linkage, and interactive programming. Students required to write, test, and debug COBOL programs.

Prerequisite: 92.256

**92.354 DATA BASE PROCESSING SYSTEMS****3 semester hours**

Details and examines data base terminology, organization, and models. Analysis, design, and administration of a relational compatible data base explored through actual applicable programming experiences.

Prerequisite: 92.256

**92.356 OPERATING SYSTEMS****3 semester hours**

Presents an overview of operating systems including real and virtual operating systems and communications software and techniques. Includes diagnostic facilities, utility routines, and system commands. Detailed look at UNIX provided.

Prerequisite: 92.350

**92.358 DATA COMMUNICATION SYSTEMS****3 semester hours**

Data communications terminology, technology, and the functional characteristics of communications hardware and software detailed and explored. Emphasizes systems and programming considerations as related to a commercial environment.

Prerequisite: 92.350

**92.432 INTERNSHIP IN C.I.S.****3-6 semester hours**

An educational arrangement between the student and an approved industrial, business, or government agency that provides a supervised work experience in a professional area of computer and information science. The experience relates to the academic principles and theories upon which the Computer and Information Systems curriculum is based.

Prerequisite: Grade point average of 2.75 and 80 credits

**92.450 EXPERT SYSTEMS AND ARTIFICIAL INTELLIGENCE****3 semester hours**

A survey of basic concepts and techniques of expert systems and artificial intelligence applied to commercial programming systems. Knowledge representation, constraints, and capabilities of different notational systems, search strategies, problem representation, and problem-solving methods used in expert systems developed. Applications and illustrations from the commercial environment stressed.

Prerequisite: 92.256 or 53.277

**92.456 MANAGERIAL COMPUTER APPLICATIONS****3 semester hours**

Provides practical experience in the analysis of business problems through advanced techniques and concepts of

124/COLLEGE OF BUSINESS

programming and system analysis with major emphasis on record keeping control and management information systems. Students required to present a systems proposal.

Prerequisite: 92.351

**Management  
(Code 93)****93.344 PRINCIPLES OF MANAGEMENT****3 semester hours**

Outlines fundamentals of organization and administration. Classical, behavioral, and management science schools; principles and practices in planning, organizing, and controlling business activities; and operating functions in a business firm are presented.

Prerequisite: 40.212

**93.345 PERSONNEL MANAGEMENT****3 semester hours**

Presents policies and current practices in the recruitment, selection, training development, evaluation, and compensation of employees in an organizational setting. These are examined within the context of internal and external environmental constraints with special attention to government regulations.

**93.346 LABOR AND INDUSTRIAL RELATIONS****3 semester hours**

Describes administration of the relationship between management and the labor force, both where that relationship is governed by a collective bargaining agreement and where it is not. Includes development of the social and legal status of trade unions, organizing, negotiations, strikes, the grievance procedure, and union security.

**93.348 OPERATIONS MANAGEMENT****3 semester hours**

Introduces operation problems encountered in manufacturing and service industries.

Prerequisite: 93.344, 40.246, or 53.123

**93.432 INTERNSHIP IN MANAGEMENT****3-6 semester hours**

Prerequisite: 93.344, grade point average of 2.75, and junior or senior standing

**93.440 SMALL BUSINESS INSTITUTE SEMINAR****1-3 semester hours**

Teams of students work with local businesses in a consultancy capacity to aid in the resolution of actual business problems. Work includes analysis of a problem, determination of alternative solutions, recommendation of the optimum course of action by means of an oral presentation to business owners, and a written report to the regional office of the Small Business Administration.

**93.445 MANAGERIAL COMMUNICATIONS****3 semester hours**

Studies the process and structure of communication in the business organization and factors affecting the flow of information. Emphasizes verbal, nonverbal, and written

communication as they relate to managerial responsibility. Group discussion exercises and individual research and writing projects relate these principles to the attainment of proficiency in managerial communication.

Prerequisite: Junior standing

### **93.446 BUSINESS POLICIES AND STRATEGIES**

**3 semester hours**

Studies the process by which management sets goals, objectives, policies, and procedures.

Prerequisite: 93.344, 96.313, 97.310, and senior standing

### **93.449 ORGANIZATIONAL BEHAVIOR**

**3 semester hours**

Focuses on small group, interpersonal, and intergroup processes in organizations. Integrates experiential case and traditional methods of instruction.

Prerequisite: 93.344

### **93.457 BUSINESS AND SOCIETY**

**3 semester hours**

Relates the American business system and individual business firms to the cultural and economic environment. It examines the powers and responsibilities of the business system as a major institution within society as well as individual business firms in the same society. Course addresses both social responsiveness and ethics.

Prerequisite: 93.344, 96.313, 97.310, and senior standing

### **Office Systems (Code 94)**

#### **94.221 OFFICE SYSTEMS CONCEPTS**

**3 semester hours**

An overview of office systems—technology, people, and procedures—with organizational and environmental contexts. Major technologies, both hardware and software, that support information creation, storage, retrieval, manipulation, and distribution are covered. Introduces applications and systems software using computer laboratory projects.

#### **94.302 BUSINESS DOCUMENT GENERATION**

**3 semester hours**

Provides instruction and practice in writing, using computer software for producing business documents.

Prerequisite: 94.221

#### **94.330 TELECOMMUNICATION SYSTEMS MANAGEMENT**

**3 semester hours**

An introduction to telecommunications in the business environment. Topics include telephone, data codes, protocols, network architectures, local area networks, communications media, hardware, and software. Management issues and practical applications are integral to course. Emphasis on application of telecommunications to facilitate information interchange in whatever form the information takes: data, voice, text, and image.

Prerequisite: 90.333 and 94.221

#### **94.401 INFORMATION RESOURCE MANAGEMENT**

**3 semester hours**

Provides a study of records creation, inventory and analysis, active/inactive records maintenance, storage and retrieval, micrographics, and computer information management systems.

Prerequisite: 90.333 and 94.221

#### **94.403 OFFICE SYSTEMS MANAGEMENT**

**3 semester hours**

A study of the most acceptable methods and practices of office systems. Topics include organization and planning of office systems, human relations, controlling operations, and processing information. Emphasis on competencies needed for organizing and administering automated office systems.

Prerequisite: 90.333 and 94.221

#### **94.405 TRAINING AND DEVELOPMENT IN OFFICE SYSTEMS**

**3 semester hours**

Application of theories of learning and instructional development to the education and training of employees in office systems. Topics include instructional design, technology, and the implementation, evaluation, and management of training in an organizational environment.

Prerequisite: 94.221

(Offered spring semester only)



**Finance  
(Code 96)**

**96.313 BUSINESS FINANCE**

**3 semester hours**

Studies financial management in the areas of asset valuation, risk, working capital management, capital budgeting, cost of capital, financial structure, financing sources and dividend policy.

Prerequisite: 91.220, 40.211, 212

**96.323 MONEY, CAPITAL MARKETS, AND FINANCIAL INSTITUTIONS**

**3 semester hours**

Studies short-term money market and long-term capital market instruments, major financial institutions, the relationship between interest rates and security prices, and the role of the consumer and the government in the financial markets.

Prerequisite: 96.313

**96.333 COMMERCIAL BANK OPERATIONS (MANAGEMENT)**

**3 semester hours**

Covers fundamental principles of bank operations. Includes a survey of various bank functions such as accounting, trust department, lending operations, international financial services, public service, and liability management.

Prerequisite: 96.313

**96.343 INVESTMENT MANAGEMENT**

**3 semester hours**

Outlines principles of security investments: descriptions of investments instruments, investment planning, security valuation, portfolio theory and strategy, and security markets.

Prerequisite: 96.313

**96.413 INTERNATIONAL FINANCE**

**3 semester hours**

Studies the principles and practices relevant to understanding the nature of international finance, its problems, and its institutions. Discussion will center on sources and instruments of international export and import financing, exchange-rates, balance-of-payments and governmental regulations and policies, financial management, as well as accounting for international transactions.

Prerequisite: 96.313

**96.423 SECURITY ANALYSIS AND PORTFOLIO THEORY**

**3 semester hours**

Analysis in detail of the major elements related to determining the earnings and risk potential of securities and the study of the underlying principles inherent to portfolio construction.

Prerequisite: 96.343

**96.432 INTERNSHIP IN FINANCE**

**1-6 semester hours**

Prerequisite: 96.313, grade point average of 2.75, and junior or senior standing  
126/COLLEGE OF BUSINESS

**96.454 FINANCIAL MANAGEMENT DECISIONS**

**3 semester hours**

Studies business financial problems and the development of financial decision-making tools and practices as used in the decision-making role of the financial manager.

Prerequisite: 96.313

**96.463 SEMINAR IN FINANCE**

**3 semester hours**

Explores a wide range of topics in finance, primarily focused in the area of financial management. Designed primarily for senior finance majors.

Prerequisite: 96.313, 343

**96.473 SEMINAR IN INVESTMENTS**

**3 semester hours**

Examines a wide variety of topics in the field of investment management and portfolio theory. Designed primarily for senior finance majors.

Prerequisite: 96.313, 343

**Marketing**

**(Code 97)**

**97.310 MARKETING: PRINCIPLES AND PRACTICES**

**3 semester hours**

Surveys the fundamental features of contemporary marketing systems and the planning required to make available satisfying goods and services to customers at a profit. Explains the role of marketing in society and the institutions which compose the market system. Describes components of the marketing mix-product planning, distribution, pricing, and promotion.

Prerequisite: Economics 40.212

**97.320 MARKETING FOR NONPROFIT ORGANIZATIONS**

**3 semester hours**

Hospitals, social service agencies, universities, clubs, fraternities and sororities, political candidates, governments, churches, and libraries are some of the nonprofit organizations which are challenged to effectively solve their marketing problems. Students will, through understanding and applying established marketing theory, techniques, and methods, realize how they can aid these important organizations in developing better product, price, distribution, and promotion decisions for the publics they seek to serve.

Prerequisite: Marketing 97.310

**97.350 RETAIL MANAGEMENT CONCEPTS**

**3 semester hours**

Presents retailing as a dynamic aspect of the marketing distribution system. Ultimate consumer/marketing analysis, store location, store layout, merchandising, pricing, promotional issues, and problems are considered using retail cases.

Prerequisite: Economics 40.212; Marketing 97.310

<b>97.360 ADVERTISING MANAGEMENT: ORGANIZATION AND PLANNING</b>	<b>3 semester hours</b>
Studies the personal selling element of the marketing/promotional program from a management perspective. Recruiting, selecting, training, organizing, motivating, compensating, evaluating, and controlling the sales force are treated, as well as management's planning responsibilities, which include designing intelligence systems, and forecasting and establishing sales territories. Special consideration is given to sales management's inputs and integration with marketing management.	
Prerequisite: 97.310	
<b>97.370 SALES MANAGEMENT</b>	<b>3 semester hours</b>
Studies the personal selling element of the marketing/promotional program from a management perspective. Recruiting, selecting, training, organizing, motivating, compensating, evaluating, and controlling the sales force are treated, as well as management's planning responsibilities which include designing intelligence systems, forecasting and establishing sales territories. Special consideration is given to sales management's inputs and integration with marketing management.	
Prerequisite: 97.310	
<b>97.410 INTERNATIONAL MARKETING MANAGEMENT</b>	<b>3 semester hours</b>
Applies the managerial process to the development of international marketing programs. Emphasizes the development and determination of objectives and methods of organization including the execution of research, advertising, and distribution activities. Considers special problems of adopting marketing principles to fit conditions in different countries. Selected cases and readings.	
Prerequisite: 97.310	
<b>97.430 CONSUMER BEHAVIOR</b>	<b>3 semester hours</b>
Analyzes the role of the consumer as the ultimate buyer of the product and the strategy and forces directed at the consumer by the seller. Topics include models of consumer buying behavior, consumer motivation, impact of advertising on product, and consumer as decision maker in the market place. Reviews selected cases.	
Prerequisite: 97.310	
<b>97.432 INTERNSHIP IN MARKETING</b>	<b>3-6 semester hours</b>
Prerequisite: 97.310, 2.75 QPA, and junior or senior standing	
<b>97.440 MARKETING RESEARCH</b>	<b>3 semester hours</b>
Develops the skills of the scientific marketing research procedure (problem definition, research design, data collection, analysis, and interpretation). Applies recent developments in marketing information systems to product planning,	

<b>planning, advertising research, consumer, and competitive analysis.</b> <b>Prerequisite:</b> 97.310 and 40.346	<b>97.460 MARKETING MANAGEMENT</b> <b>3 semester hours</b> <p>Presents an advanced study of the marketing programs from the systems and managerial viewpoint. Applies analytic, communicative, and problem-solving skills to evaluation and creative planning in the marketing environment. Uses business marketing cases as a vehicle for developing the marketing executive's abilities.</p> <p>Prerequisite: 97.310</p>
<b>97.490 CONTEMPORARY PROBLEMS/ ISSUES IN MARKETING</b> <b>3 semester hours</b> <p>Explores major issues, trends, and problems characterizing the current marketing scene. Encourages students to do extensive reading in current marketing and other related literature. Theoretical, environmental research, and trade-off issues in marketing are assessed. Case study, group projects, and group dynamics are utilized.</p> <p>Prerequisite: Senior standing and 6 credits in marketing</p>	<b>Business Law (Code 98)</b> <b>98.331 BUSINESS LAW I</b> <b>3 semester hours</b> <p>Introduces the nature and sources of law, the judicial system, principles of law applicable to business transactions including contracts, torts, sales, property, and criminal law.</p>
<b>98.332 BUSINESS LAW II</b> <b>3 semester hours</b> <p>Presents basic principles of commercial law (UCC), agency, and such topics as debtor/creditor relations, business organizations, and ethics.</p> <p>Prerequisite: 98.331</p>	
<b>98.450 LEGAL ENVIRONMENT OF BUSINESS</b> <b>3 semester hours</b> <p>Advanced coverage of topics in government regulation of business through administrative law, legislation, and judicial intervention. May include issues in the law of corporate securities, antitrust, environmental regulations, and other aspects of legal regulation of the competitive process.</p> <p>Prerequisite: 98.331, 40.212</p>	

# ***COLLEGE OF PROFESSIONAL STUDIES***

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*Howard K. Macauley, dean,  
College of Professional Studies*



# COLLEGE OF PROFESSIONAL STUDIES

The College of Professional Studies administers curricula in teacher education, nursing, and allied health sciences and offers courses in early childhood education, elementary education, secondary education, educational foundations, special education, communication disorders, pre-professional studies, reading, and nursing.

## Degree Programs

### School of Education

Program	Degree
Communication Disorders	B.S. in Ed.
Early Childhood Education	B.S. in Ed.
Elementary Education	B.S. in Ed.
Interpreter Training	B.S.
Secondary Education	B.S. in Ed.
<i>Biology</i>	<i>French</i>
<i>Chemistry</i>	<i>General Science</i>
<i>Communications</i>	<i>Mathematics</i>
<i>Comprehensive</i>	<i>Physics</i>
<i>Social Studies</i>	<i>Spanish</i>
<i>Earth and Space Science</i>	
<i>English</i>	
Special Education <i>(Mentally and/or Physically Handicapped)</i>	B.S. in Ed.

### School of Health Sciences

Program	Degree
Dental Hygiene	B.S. in Ed.
Health Services Associate	A.S.
Medical Technology	B.S.
Nursing	B.S.N.

### Preparatory Curricula:

Physical Therapy	
Occupational Therapy	
Cytotechnology	
Radiologic Technology	B.S.

## Institutional Memberships

- American Association of Colleges for Teacher Education (AACTE)  
American Association of Colleges of Nursing (AACN)  
American Speech and Hearing Association (ASHA)  
Conference of Educational Administrators Serving the Deaf Inc. (CEASD)  
Council on Education of the Deaf (CED)  
International Reading Association (IRA)  
Medical Technology Matching Program of Pennsylvania (MTMP of PA)  
National Association of Secondary School Principals (NASSP)  
National Council for Accreditation of Teacher Education (NCATE)  
National League for Nursing (NLN)  
Northeast Region of Pennsylvania Association for Supervision and Curriculum Development (NEPASCD)  
Nursing Education Consortium of Northeastern Pennsylvania (NEC of NEPA)  
Pennsylvania Association of Colleges and Teacher Educators (PACTE)  
Pennsylvania Association for Supervision and Curriculum Development (PASCD)  
Pennsylvania Higher Education Nursing Schools Inc. (PHENS)  
Teacher Education Council of State Colleges and Universities (TECSCU)

### School of Education

Raymond E. Babineau, director

## SCOPE AND PURPOSE OF TEACHER EDUCATION

Programs are offered for preparation of teachers for early childhood centers and elementary schools, academic subjects in secondary schools, special education, communication disorders, and business education. The business education program is administered by the College of Business; the other teacher education programs are administered in departments of the College of Professional Studies.

The teacher education program at Bloomsburg University is committed to improving the field of education through a comprehensive program which recognizes its unique contribution to society, both as a reflection of that society and as an agent for the improvement of society. To meet this obligation, the programs draw upon the knowledge and understanding of general as well as professional education. It strives for a blend in preparing a person to fulfill a role in society as an informed, inquiring, and skilled professional.

More specifically, the teacher education programs provide:

1. The basic academic preparation for persons to acquire a depth and breadth of knowledge in both general and specialized studies;
2. Basic training to insure mastery of the specific skills necessary for competent functioning as a professional;
3. An opportunity for further enrichment within the individual's area of professional competence through a regular program of speakers, seminars, and related activities;
4. Human and physical resources necessary to assist in the educational development and growth of the community served by the university; and
5. The means for the advancement of knowledge through research in specific areas of education.

Bloomsburg University is committed to the preparation of beginning teachers of the highest quality. In pursuit of that goal, the School of Education subscribes to and endorses the philosophic statement as developed by the American Association of Colleges for Teacher Education as a guide to the development and operation of all of its teacher education programs.

## GENERIC ROLE COMPETENCIES

The teacher education faculty believe that for successful teaching to occur, the teacher, as a professional decision maker, must perform effectively in a number of different roles. The teacher also must command functional knowledge in appropriate content area(s) as well as in cognate disciplines with direct or related significance for the act of teaching.

Six generic role competencies and 15 related cognate strands have been identified as central to the preparation of candidates in teacher education programs at Bloomsburg University.

## ROLE COMPETENCIES

Assessing and  
Diagnosing  
Planning  
Managing  
Instructing

Communicating and  
Interacting  
Documenting and  
Evaluating

## COGNATE STRANDS

Curriculum Theory  
Educational Anthropology  
Educational History  
Educational Law  
Educational Measurement and Evaluation  
Educational Organization and Administration  
Educational Philosophy  
Instructional Theory

Educational Psychology  
Educational Research  
Educational Sociology  
Educational Technology  
Group Dynamics  
Human Development and Exceptionality  
Knowledge in one or more content area

## ACCREDITATION OF TEACHER EDUCATION

Bloomsburg is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and the Council on Education of the Deaf. The teacher education programs outlined in this catalog have been approved for teacher certification by the Pennsylvania Department of Education. The Speech, Hearing, and Language Clinic is certified by the Professional Services Board of the American Speech, Hearing, and Language Association.

## TEACHER CERTIFICATION

The completion of one of the approved programs in teacher education is prerequisite to institutional recommendation for a teacher's certificate. Upon recommendation, an initial certificate is granted by the Commonwealth of Pennsylvania. The appeal procedure for considering the problems of certification candidates can be found in the section on Academic Grievances.

As of June 1987, all individuals seeking teacher certification in Pennsylvania were required to pass state mandated tests at levels determined by the Secretary of Education. The tests assess basic skills, general knowledge, knowledge of subjects in which certification is sought, and professional knowledge.

Initial certificate is designated as Instructional Level I. It is valid for six years. A Level I certificate is not subject to renewal beyond a total of six years after the individual begins teaching. A permanent Level II certificate is issued upon completion of three years of successful teaching and experience under a Level I certificate and the completion of a minimum of 24 semester hours of post-baccalaureate course work.

Programs offered for Level I certification are:

**Early Childhood Education**

(Pre-school through Grade 3)

**Elementary Education**

(Kindergarten through Grade 6)

**Business Education**

Accounting, Data Processing, and Marketing

**Secondary Education**

Biology, Chemistry, Communication, Earth and Space Science, English, French, General Science, Mathematics, Physics, Comprehensive Social Studies, and Spanish

**Special Education**

Mentally and/or Physically Handicapped

**Communication Disorders**

Speech Correction or Hearing Impaired

**Dental Hygienist**

## INTERSTATE CERTIFICATE AGREEMENTS

Pennsylvania cooperates in interstate agreements, which provide that holders of Pennsylvania Instructional Certificate are eligible (subject to special provisions) for instructional certificates in the following states:

Alabama	Indiana	Rhode Island
California	Maryland	South Dakota
Delaware	Massachusetts	Utah
District of Columbia	Nebraska	Vermont
Hawaii	New Jersey	Virginia
Idaho	Ohio	Washington

Other states also may be willing to grant reciprocity, but graduates of Pennsylvania-approved programs seeking certification in another state should write to the teacher certification office of the state in which certification is desired for application forms and instructions. Names and addresses of the appropriate officials should be available in most college placement office libraries.

## ADMISSION TO TEACHER EDUCATION

Students who wish to pursue teacher education are initially admitted to the College of Professional Studies with an intended major and schedule courses in harmony with the requirements of the program they wish to follow. In due course, they apply for admission to teacher education through the department in which their intended major resides. Admission to teacher education is governed by university policy No. 3810 which states that for admission, the candidate must:

1. Possess a cumulative grade point average of 2.5 or higher;
2. Successfully complete prior to admission to teacher education programs (cutoff scores to be established by the faculty in teacher education locally and Secretary of Education for certification purposes) of the Pennsylvania Teacher Certification Tests and/or a nationally normed tests of:
  - a. Basic skills
  - b. General knowledge;
3. Successfully complete a field experience;
4. Submit two (2) recommendations from teacher education faculty including the field experience supervisor;
5. Successfully complete (grade of C or better):
  - a. Two English composition courses
  - b. Public speaking and/or interpersonal communication course;
6. Complete tests of (with remediation begun as required):
  - a. Speech
  - b. Hearing
  - c. Vision
  - d. Tuberculosis (yearly);
7. Present evidence of membership in a professional education organization providing professional liability insurance or possession of a professional liability insurance policy;
8. Submit a handwritten personal biography that includes:
  - a. Personal interests
  - b. Special skills
  - c. Experiences with children, youth, or adults that would be relevant for a preservice teacher; and
9. Complete a personal interview with a team of School of Education faculty where all the above are reviewed and recommendation for or against admission is made.

(Students will be apprised of the demands of Pennsylvania Acts 33 and 34.)

## RETENTION IN TEACHER EDUCATION

Admission to teacher education is equivalent to candidacy for the degree, bachelor of science in education. This candidacy can be revoked if the following requirements, as stated in University Policy No. 3810, are not met.

1. Successful completion (grade C or better) in professional education courses and/or in the area of specialization;
2. Maintenance of cumulative grade point average of 2.5 or better or be placed on probation one semester. If grade point average falls below 2.5 beyond that time, then dismissal from the program occurs;
3. Continuation of field and clinical experiences in specific courses;
4. Close supervision of above by advisers and chairperson to ensure student teaching eligibility and to suggest counseling and/or remediation; Attendance at least once a year at a class meeting held by department(s) for dissemination of information and general advisement; and
5. Demonstration of competency in student teaching
  - a. Recommendations from and competency evaluations by cooperating teacher(s)
  - b. Recommendations from and competency evaluations by university supervisor(s)
  - c. A letter grade of C or better.

## GRADUATION FROM TEACHER EDUCATION PROGRAMS

In order to graduate from a teacher education program, a candidate must have met the requirements as stated in the monitoring (retention policy) and have met the requirements listed below.

1. A cumulative grade point average of 2.5 or better.
2. Successful completion (cutoff scores to be established by the faculty in teacher education locally and the Secretary of Education for certification purposes) of Pennsylvania Teacher Certification Tests of:
  - a. Basic skills
  - b. Generic skills
  - c. Subject matter knowledge (prior to student teaching)
  - d. Professional knowledge

**Note:** Candidates may take Pennsylvania Teacher Certification Tests on demand (before or after graduation) and may choose to share scores with others.

## **Field Experiences**

Students in teacher education are required to engage in the field experiences during which they work in and observe the educational process in the schools. It is intended that these experiences will help the students decide whether they wish to follow careers in teaching. Participants are exposed to many aspects of teaching and to the operation of the schools, thus providing experience that should increase the relevancy of course work in professional education.

Field experiences, in addition to student teaching, are a part of courses in professional education. These include field trips, observations, micro-teaching, and assisting teachers in school settings.

## **Student Teaching**

Teacher education culminates in student teaching for a semester in public or private schools.

Undergraduates who have satisfied the prerequisites for student teaching courses are assigned to student teaching during the first or second semester of their senior year. They are placed based on the availability of qualified cooperating teachers in their subject area and the willingness of schools with programs approved by the university. Students should be prepared to accept assignments in any of the student teaching centers.

The student teaching semester is divided into two equal periods in order to provide an opportunity for students to teach at two grade levels of education and frequently in two socio-economic environments.

Because of constantly changing educational and socio-economic circumstances, flexibility of format is maintained in the student teaching program.

## **Student Teaching Centers**

Bloomsburg selects its student teaching centers and cooperating teachers in urban, suburban, and rural areas. Students in elementary and secondary education may be assigned to Central Pennsylvania, to suburban Philadelphia, or to inner-city locations. Business education student teaching centers are located in the Bloomsburg, Allentown, and Williamsport areas. Students in communication disorders and special education are assigned to the White Haven Center, Selinsgrove Center, and to public schools and other agencies located in Pennsylvania and nearby states.

It may be possible for students in teacher education programs to be assigned to do their student teaching in one of the international centers with which Bloomsburg cooperates: Liverpool and London, England; or other locations by arrangement. Further information about this program may be obtained from department chairpersons.

## **COOPERATING TEACHERS AND CLINICIANS**

Cooperating teachers and clinicians are selected by faculty in teacher education based on criteria set forth by the Pennsylvania Department of Education which are:

- a. Have at least three years of teaching experience, one year of which has been in the district to which the teacher candidate is assigned;
- b. Have a teaching assignment appropriate to the subject competency of the teacher candidate;
- c. Have completed a program of preparation on observation and evaluation skills developed by the college or university for the cooperating teacher.

Training at Bloomsburg University is accomplished through the following means:

1. Individualized training;
2. Use of student teaching and clinical manual;
3. Providing research and reading materials to cooperating teachers and clinicians on a regular basis;
4. Consortiums (cooperating teachers/clinicians are invited to a yearly meeting); and
5. Graduate course offerings.

## **SCHOOL OF EDUCATION**

### **COURSE DESCRIPTION**

**Professional Studies  
(Code 79)**

#### **Interdisciplinary Course**

#### **79.312 INTERNSHIP IN EDUCATION**

**1-15 semester hours**

A work study program in an education-related setting applicable to fulfilling free electives in teacher education degree programs.

## **Communication Disorders and Special Education**

### **Communication Disorders**

#### **Faculty**

Professors Robert J. Kruse, G. Donald Miller, Gerald W. Powers (assistant chairperson); Associate Professors Richard M. Angelo (clinical director), Ronald R. Champoux, Samuel B. Slike; Assistant Professors Dianne H. Angelo, Judith M. Hirshfeld, Robert J. Lowe, Julia M. Weitz; Instructor Joann Jackowski

## CURRICULUM IN COMMUNICATION DISORDERS

Ronald R. Champoux, curriculum coordinator

The objective of the curriculum in communication disorders is to prepare personnel to work in public schools, hospitals, clinics, and rehabilitation centers with clients who are handicapped in speech, hearing, and language.

Upon successful completion of the curriculum and recommendation by the university, certification in speech correction is granted by the Pennsylvania Department of Education. The curriculum provides academic and clinical work which constitute part of the prerequisite for the Certificate of Clinical Competence in Speech Pathology or Audiology issued by the American Speech, Hearing, and Language Association; additional prerequisites include a master's degree and certain prescribed experience.

Students in the curriculum in communication disorders are required to complete the five-year program before they are eligible for recommendation by the university for certification. Admission to the undergraduate curriculum in communication disorders is selective. Students must take a minimum of nine semester hours in courses in communication disorders before they may apply for admission. The time for application by students is in the middle of the sophomore year. Transfer students, readmitted students, graduate students in communication disorders who have undergraduate deficiencies, and students who are reapplying for admission compete on equal terms with students at each admission period.

Selection within the quota for each admission period is determined by the quality point average in the courses that have been taken in communication disorders and the cumulative quality point average. Other professional factors determine the selection in case there is a tie in the measure - in this case the decisions are made by the faculty of the department.

The quota for each admission period is predetermined by the department in the light of the projected capacity of clinical facilities. Students who are not admitted may reapply at a subsequent admission period.

### Curriculum Requirements

**A. General Education:** (See section on General Education Requirements.)

**B. Professional Core Courses:** Communication Disorders 74.152, 240, 251, 252, 253, 276, 350, 351, 352, 376\*, 402, 460\*, 461, 467; 18 semester hours required from other departments; Biology 50.366, Education 60.251, 393; Mathematics 48.160; Special Education 70.101, 202, and 8 other credits upon approval of the adviser.

\*74.376, 460 may be taken with special permission by students who have not been admitted to the major, but such permission does not imply any advantage relative to admission.

**C. Elective Courses:** Additional courses needed to meet the minimum credits required for graduation.

**D. Graduate Program:** (See the *Graduate Catalog*.)

## Area of Concentration in Education of Hearing Impaired

Samuel B. Slike, curriculum coordinator

The curriculum in education of the hearing impaired prepares classroom teachers and itinerant hearing therapists to work in educational settings with hearing impaired children and adults.

Individuals seeking certification to teach in educational programs for the hearing impaired are first required to major in early childhood, elementary, secondary, special education, or communication disorders. In addition to the requirements for those majors, an area of concentration of 18 credits is required at the undergraduate level. Students electing this sequence should seek advisement from the program coordinator.

Certification to teach hearing impaired students in school programs is granted by Pennsylvania Department of Education after the completion of a graduate program. Admission to that program is competitive. Students successfully completing the graduate program receive a master's degree as well as certification to teach.

### Curriculum Requirements

**Core Courses:** 74.152 (fall-freshmen), 74.201 (fall-freshmen), 74.276 (fall-sophomore), 74.376 (spring-sophomore), 74.205 (spring-junior), 74.251 (spring-junior).

**Elective Courses:** 74.153, 469, 490

## Curriculum in Sign Language and Interpreter Training

Joanne Jackowski, curriculum coordinator

This program provides specialized training for individuals seeking to become interpreters for the deaf in a wide variety of settings such as schools, hospitals, courts, business settings, and other situations in which an interpreter is required. The objective for the sign language interpreter training curriculum is to prepare individuals for their role as communication facilitators between deaf and hearing impaired and hearing consumers within the context of a variety of settings; e.g., educational, social, or business. Individuals interested in the area of communication with the deaf have two options: a program leading to a bachelor of science or a minor in sign language. Individuals seeking entrance to the program must complete the following courses prior to formal admission to the program: Introduction to Sign Language, American Sign Language I, and American Sign Language II. Individuals completing the program are eligible to complete the requirements to be included in the Registry of Interpreters of the Deaf.

## **Curriculum Requirements**

- A. General Education:** (See section on General Education Requirements.)
- B. Professional Core Courses:** 18 sign language training requirements—74.153, 154, 155, 254, 255, and 256. 36 interpreter training requirements: 74.152, 201, 276, 301, 302, 303, 304, 401, 415; Communication Studies 25.103, 215, 220. Selection of minor or completion of electives with approval of adviser.
- C. Elective Courses:** As required to meet graduation requirement of 128 semester hours.

### **Minor in Sign Language**

Students from other disciplines in any of the colleges of the university may declare a minor in sign language. The minor consists of 18 credits: 20.111, 411; 26.112, 208; 28.107, 220, 290; 45.211, 213, 219, 231; 46.101, 200, 440; 48.101, 160, 211, 271, 321; 70.101; 74.460.

### **COURSE DESCRIPTIONS**

#### **Communication Disorders (Code 74)**

##### **74.152 INTRODUCTION TO COMMUNICATION DISORDERS**

**3 semester hours**

Presents an introduction to the study of human communication and communication disorders, the role of professionals in speech and language pathology and education of the hearing impaired, basic processes and functions of human communication, and typical problems of children and adults.

##### **74.153 INTRODUCTION TO SIGN LANGUAGE**

**3 semester hours**

Involves a study of sign language vocabulary and fingerspelling techniques used in communication with members of the deaf community. Emphasis is placed on developing expressive and receptive skills.

##### **74.154 AMERICAN SIGN LANGUAGE I**

**3 semester hours**

Involves a study of American Sign Language (ASL) including the history of ASL and its recognition as a language. Major focus will be on the development of expressive and receptive conversational ASL skills.

Prerequisite: 74.153 or equivalent skills

##### **74.155 AMERICAN SIGN LANGUAGE II**

**3 semester hours**

A continuation of ASL I with emphasis placed on conversational fluency.

Prerequisite: 74.154

##### **74.201 HISTORY, EDUCATION, AND GUIDANCE OF THE HEARING IMPAIRED**

**3 semester hours**

Explores the handicap of hearing impairment with emphasis on the history of educational procedures and guidance in communicative, psychological, and vocational habilitation.

##### **74.205 INTRODUCTION TO INSTRUCTIONAL METHODS FOR THE HEARING IMPAIRED**

**3 semester hours**

Introduces students to the design of instructional procedures and methods of implementing curricula for education of the hearing impaired. Discusses and demonstrates traditional and innovative approaches to teaching.

##### **74.240 NORMAL LANGUAGE ACQUISITION**

**3 semester hours**

Focuses upon current information and theory regarding normal language development.

Prerequisite: 74.252 and admission to degree program

##### **74.251 PHONETICS**

**3 semester hours**

Studies of the physiological, acoustical, perceptual, and descriptive aspects of speech and sound production. Primary emphasis is placed on the description, classification, and transcription of speech sounds. Provides a base of knowledge for the diagnosis and treatment of phonemic and phonological disorders of communication.

Communication Disorders Prerequisites: 74.252, 253

Hearing Impaired Prerequisites: 74.152, 201, 276 and junior or senior status

##### **74.252 SPEECH PATHOLOGY I**

**3 semester hours**

Studies the neurophysiological bases of language and speech as fundamental to the understanding of pathologies of language and speech.

##### **74.253 SPEECH PATHOLOGY II**

**3 semester hours**

Studies in great depth speech and language pathologies. Research findings are explored.

##### **74.254 THE DEAF CULTURE**

**3 semester hours**

Involves study and analysis of the deaf community. Emphasis on research and discussion of social, psychological, and personal aspects of the members of the deaf community.

##### **74.255 AMERICAN SIGN LANGUAGE III**

**3 semester hours**

Continuation of 74.154 and 155. Major focus on the study of ASL sign principles and linguistic structure of the language reinforced by drills and vocabulary sessions to continue building expressive and receptive ASL skills.

Prerequisite: 74.154 and 155 or equivalent skills

**74.256 AMERICAN SIGN LANGUAGE IV**  
**3 semester hours**

A continuation of 74.255. The major thrust focuses on more advanced and complex grammatical and linguistic aspects of ASL, reinforced by drills and vocabulary development sessions.

**74.276 INTRODUCTION TO AUDIOLOGY**  
**3 semester hours**

Introduces students to the causes, evaluation techniques, and rehabilitative procedures for various types of hearing problems; related auditory, speech, psychological, and educational factors; the roles of parent, educator, and specialist in the rehabilitation program. Hearing conservation procedures in schools and industry.

**74.301 INTRODUCTION TO INTERPRETING**  
**3 semester hours**

An introductory course in interpreting. Involves topics such as the Registry of Interpreters for the Deaf, its purpose, code of ethics, physical factors, levels of certification, and the communication process. The mental processes of interpreting and transliteration are discussed. Laboratory assignments develop interpreting and transliteration skills.

Prerequisite: Completion of sign language training requirements

**74.302 INTERPRETING ENGLISH TO AMERICAN SIGN LANGUAGE**  
**3 semester hours**

A continuation of the building of expressive interpreting skills. Experience gained through laboratory work and classroom discussions when interpreting situations for observation and practice are presented. Emphasis on professionalism, principles, and ethics.

Prerequisite: 74.301

**74.303 TRANSLITERATING ENGLISH TO SIGN LANGUAGE**  
**3 semester hours**

A continuation of the building of expressive transliteration skills. Experience gained through laboratory work and classroom discussions when transliteration situations for observation and practice are presented. Emphasis on professionalism, principles, and ethics.

Prerequisite: 74.301

**74.304 ORAL INTERPRETING/ TRANSLITERATING**  
**3 semester hours**

Involves the identification of information and techniques and the utilization of skills required for effective oral interpreting and transliterating. Included is the use of personal characteristics to facilitate speech reading and the identification of the needs of the hearing impaired individual during interpretation.

Prerequisite: 74.152, 276, and 301

**74.350 ASSESSMENT AND REMEDIATION OF SPEECH DISORDERS**  
**3 semester hours**

Considers the major theoretical approaches to assessment and treatment of speech disorders. Students engage in clinical observation, examination of standardized tests, and procedures used in the differential diagnosis of disorders in the areas of articulation, phonology, fluency, and voice. Training in the administration of therapy programs is provided.

Prerequisite: 74.251, 252, 253, 467 (or concurrent enrollment) and admission to degree program

**74.351 ASSESSMENT AND REMEDIATION OF LANGUAGE DISORDERS**  
**3 semester hours**

Prepares students for the clinical application of language analysis procedures drawn from linguistics, psycholinguistics, and socialinguistics, and to apply knowledge from these areas to the management of language disorders. Various intervention models are studied.

Prerequisite: 74.240, 251, 252, 253, 467 (or concurrent)

**74.352 CLINICAL PRACTICUM: COMMUNICATION DISORDERS**  
**6 semester hours**

Allows students to engage in supervised clinical work in the Speech, Hearing, and Language Clinic or related facilities and gives them increasing responsibility and experience with cases of greater complexity.

Prerequisite: 74.351, 467

**74.376 AUDITORY TRAINING AND SPEECH READING**  
**3 semester hours**

Fundamental theory and underlying principles of auditory training and speech reading presented. The education of children and adults with moderate and severe hearing losses are discussed in light of auditory training and speech reading techniques. Principles of speech acoustics and perception are applied. Information and redundancy theory are discussed. An introduction to auditory training equipment is provided.

**74.390 DIRECTED PROJECT IN COMMUNICATION DISORDERS**  
**3 semester hours**

Gives students the opportunity to carry out special in-residence or field projects in professional service programs under the direction of the faculty or designated practitioners. A detailed project plan must be submitted for faculty approval prior to registration.

**74.401 SIGN TO VOICE INTERPRETING**  
**3 semester hours**

Introduces the theory and practice of comprehending a variety of sign language usages and voicing the messages into spoken English. Course and its laboratory emphasize the broad skills of comprehending sign language, forming syntactically correct English sentences and the proper use of the voice.

Prerequisite: 74.301

<b>74.402 CLINICAL FIELD EXPERIENCE</b> <b>12 semester hours</b>	<b>74.469 EXPERIENCE IN EDUCATION OF THE HEARING IMPAIRED</b> <b>1-3 semester hours</b>
Provides a full-semester program of 30 hours per week of supervised practicum in a field experience. Prospective speech and hearing clinicians gain experience by working with professional people in the field. Assignments emphasize providing speech and hearing services in the public school, clinics, and hospitals.	Provides experience working under supervision with deaf and hearing impaired children in the demonstration classroom or field facility. Prerequisite: Consent of the instructor
<b>74.415 PRACTICUM IN INTERPRETING</b> <b>3 semester hours</b>	<b>74.471 SEMINAR IN SPEECH PATHOLOGY</b> <b>3 semester hours</b>
Involves the placement of the student in interpreting situations on and off campus six hours a week to gain "on-the-job" experience.	This graduate level course offers a variety of supervised advanced experiences related to clinical management of a variety of communication impaired individuals in the Speech, Hearing, and Language Clinic. Students plan and participate weekly in team diagnostic evaluations. Students are also assigned clinical cases and provide treatment while accumulating ASHA clinical hours. Experiences include assessment, goal setting, program planning, therapy, conferencing, reporting, and clinical problem solving.
<b>74.425 AUGMENTATIVE COMMUNICATION FOR NONSPEAKING PERSONS</b> <b>3 semester hours</b>	<b>74.472 MEASUREMENT OF HEARING LOSS</b> <b>3 semester hours</b>
This graduate course in augmentative communication for nonspeaking persons is intended primarily for students in speech and language pathology and special education as well as practicing clinicians and teachers who are currently working with severely handicapped individuals. A variety of materials and hands-on experiences will be provided.	Presents the anatomy and physiology of the hearing mechanisms. Also investigates the etiology of hearing losses, interpretation of audiometric evaluations and available rehabilitative procedures. Provides laboratory experience in the administration of clinical audiometric evaluations. Emphasizes special tests and advanced audiometric procedures. Prerequisites: 74.256, 376
<b>74.460 PSYCHOLINGUISTICS</b> <b>3 semester hours</b>	<b>74.480 INDEPENDENT STUDY AND RESEARCH</b> <b>1-3 semester hours</b>
Presents the study of language as a psychological phenomenon. Areas of study include language acquisition, meaning, biology of language, sociolinguistics, nonverbal communication, animal communication, and the application of psycholinguistics to communication disorders. Prerequisite: 74.251	Permits students to work under faculty guidance when particular needs cannot be met by registration in regularly scheduled courses. Learning experiences may include library research or creative academic projects. Credit is determined by the nature and scope of the project undertaken.
<b>74.461 CLINICAL PROBLEMS IN COMMUNICATION DISORDERS</b> <b>3 semester hours</b>	<b>74.490 COUNSELING NEEDS OF COMMUNICATIVELY DISORDERED INDIVIDUALS AND THEIR FAMILIES</b> <b>3 semester hours</b>
Practical consideration of day-to-day problems encountered by the speech clinician in public school, clinics, and hospitals; Pennsylvania School Law and state-mandated special service programs.	This course is designed to help students to identify counseling needs of communicatively disabled individuals and their families and to provide basic, short-term counseling. Students will be introduced to various counseling strategies in individual and group settings as appropriate to schools and speech and hearing clinics. Open to undergraduates who do not intend to enroll in the graduate program in education of the hearing impaired at the university. Prerequisite: Student teaching, practicum, or internship
<b>74.462 PROBLEMS IN EDUCATION OF THE HEARING IMPAIRED</b> <b>3 semester hours</b>	
Addresses the educational problem of hearing impairment and the function of teachers in public and private educational settings.	
<b>74.467 APPLIED BEHAVIOR ANALYSIS IN SPEECH AND LANGUAGE THERAPY</b> <b>3 semester hours</b>	
Applies the psychology of learning to communicative behavior and clinical problems. Presents current educational and therapeutic trends and practices. Prerequisites: 74.351 or concurrent registration	

# Special Education

## Faculty

Professors Mary B. Hill, Kenneth P. Hunt, William L. Jones, Andrew J. Karpinski (chairperson), Colleen J. Marks, John M. McLaughlin Jr., Carroll J. Redfern; Associate Professors James T. Reifer, Joseph M. Youshock; Assistant Professor Ann Lee

## Program Description

The program in special education offers certification for teachers of the mentally retarded and/or physically handicapped individuals; an area of concentration for students in hearing impaired; and the courses and experiences which support these curricula.

Special education faculty are located in Navy Hall, which is equipped with therapy rooms, television equipment, and other equipment and materials used in the training of exceptional individuals.

Students enrolled in special education have the opportunity of participating in practica in supervised and graded special classes. Students participate in full-time student teaching at the Selinsgrove Center and public schools in Columbia, Lackawanna, Luzerne, Lycoming, Montour, Northampton, Northumberland, Snyder, Sullivan, and Centre Counties.

Selection for admission to special education is made by the faculty in light of the applicant's academic performance and other criteria.

Applicants who are not selected for special education should consult the coordinator of academic advisement concerning transfer to another curriculum. They are, however, eligible to reapply for special education during the next selection period.

## CURRICULUM FOR TEACHING MENTALLY AND/OR PHYSICALLY HANDICAPPED

**Andrew J. Karpinski, curriculum coordinator**

**A. General Education:** (See the section on General Education Requirements.)

**B. Core Courses:** English 20.101, 104, 200 or 201; Communication Studies 25.103 or 104; Psychology 48.101, 110; Biology 50.101; Mathematics: 53.141. (Core courses designated by the departments as applicable to the general education requirements may be elected in partial fulfillment of that requirement.) Student is responsible for checking catalog for all prerequisites.

**C. Professional Education Related Courses:** 05.321; 60.251, 393, 62.302 or 432, 62.371, 62.398, 62.373 or 62.375 or 65.374

**D. Specialization:** 70.101, 200, 202, 231-not required for hearing impaired program, 250, 251, 253, 353, 357, 401, 432, 450, 451, 461

**E. Electives Courses:** 70.255, 256, 375; 74.152, 153

## Area of Concentration

Hearing impaired (minimum 18 credits) 74.152, 201, 205, 251, 276, 376; Electives: 74.153\*, 469\*, 490\*

\* Students anticipating applying for admission to graduate major in education of the hearing impaired are strongly urged to elect these courses.

## COURSE DESCRIPTIONS

### Special Education (Code 70)

#### 70.101 INTRODUCTION TO EXCEPTIONAL INDIVIDUALS

3 semester hours

Reviews all major areas of exceptionality (visually impaired, mentally retarded, hearing impaired, communication disorders, behavior disorders, learning disabilities) and acquaints the student with social, sociological, psychological, medical, historical, legal, economic, and professional aspects of these conditions. Current research is reviewed, and the latest techniques for facilitating meaningful interactions with these individuals are reviewed.

#### 70.200 INTRODUCTION TO THE MENTALLY AND PHYSICALLY HANDICAPPED

3 semester hours

An orientation to the nature of mental and physical handicaps; concerned with etiology and types and with the behavioral and learning characteristics involved. Exposes students to an historical survey of mental retardation, research in mental retardation, community and state responsibility in relation to the mentally and physically handicapped, prevention and treatment, educational and recreational avenues for the mentally and physically handicapped, and various facets of the relationship and reactions of the individual and parent.

#### 70.202 TECHNOLOGY FOR EXCEPTIONALITIES

3 semester hours

Provides the special education major with an introduction to technology as it is being applied to meet the needs of exceptional individuals and special education teachers. Computers, as well as other technological devices, are studied in relation to use as prosthetics, instructional tools, administrative tools (particularly Individualized Education Program generation and data management), and environmental interfaces.

**70.231 LANGUAGE I****3 semester hours**

Aids the teacher in developing understanding of listening and speech processes, developmental and defective. Includes introduction to the anatomy and physiology of speech and hearing mechanisms, developmental stages of language acquisition, etiological factors related to receptive and expressive deficits, and techniques for developing listening and speaking skills by the classroom teacher.

**70.250 BEHAVIOR DISORDERS****3 semester hours**

Deals with inappropriate behaviors emitted by children and youth and the techniques and strategies that may be used to modify these behaviors. Some other areas covered are psychological disorders, research related to aggressive and withdrawn behavior, and techniques and materials used in social curriculum. Examines group and individual problems at all levels of schooling.

**70.251 LEARNING DISABILITIES****3 semester hours**

Presents its content in three units, a general overview, the central nervous system, and specific learning disabilities. Includes general characteristics of learning problems, their causes or related factors, the medical model, and specific language disorders and remediation.

**70.253 METHODS AND MATERIALS FOR TEACHERS OF THE LOW FUNCTIONING MENTALLY RETARDED****3 semester hours**

Provides supervised student contact with low functioning mentally retarded and multi-handicapped individuals (LFMR). The student designs and implements educational experiences for LFMR and builds and uses materials suitable to the abilities of the individuals with whom they work. Exposes methods and materials appropriate to this segment of the mentally retarded population. Course conducted at the Selinsgrove Center.

Prerequisites: Junior or senior standing and 70.200

**70.255 EXPERIENCE WITH EXCEPTIONAL INDIVIDUALS****3 semester hours**

Presents clinical or field experience working individually or in small groups with exceptional individuals in various settings.

Prerequisites: Junior or senior standing and consent of the instructor

**70.256 THE GIFTED CHILD****3 semester hours**

Assists students to become familiar with physical, mental, emotional, and social characteristics of the mentally gifted and with types of organization, teaching procedures, and curricular material used in the education of the mentally gifted. In addition, family relationships relevant to the education of gifted individuals are explored.

**70.353 ASSESSMENT AND PLANNING****3 semester hours**

Gives the students information and experience with formal and informal assessment devices and procedures, their usages and appropriateness. Covers gathering information about the learner prior to instruction concerning appropriate instructional tasks, sensory channels, interest areas, and social skills. Covers ways of developing informal assessments, gathering observational information, storing information, and planning for instruction.

Prerequisite: Junior or senior standing

**70.357 PREVOCATIONAL AND VOCATIONAL EDUCATION FOR THE HANDICAPPED****3 semester hours**

Develops a philosophy of vocational education for the mentally and/or physically handicapped, knowledge of programs and strategies to develop their pre-vocational and vocational skills, materials and assessment procedures appropriate for those students and programs.

Prerequisite: Junior or senior standing

**70.375 INDIVIDUAL PROJECT****3 semester hours**

This project is planned according to interests and needs of the individual student, in any of the following suggested areas: library research, curriculum study, internship in special aspects of educational programs.

Prerequisite: Open to juniors and seniors only with staff approval

**70.401 STUDENT TEACHING WITH EXCEPTIONAL INDIVIDUALS****12 semester hours**

Provides opportunities for the student to test educational theory by putting it into practice, opportunities to raise questions, problems and issues which may lead to advanced study, and opportunities for effective functioning in a pupil-teacher relationship in an actual classroom setting.

Prerequisite: concurrent with 70.461—seminar

**70.432 LANGUAGE II****3 semester hours**

Aids the student in preparing to teach exceptional individuals basic and refined written language skills. Includes methods and materials for teaching penmanship, spelling, syntactical structure, and reading.

Prerequisite: Junior or senior standing

**70.450 METHODS FOR ELEMENTARY SPECIAL EDUCATION****3 semester hours**

Presents fundamental principles for, and a variety of teaching techniques applicable to the range of elementary levels of special education. Organization of programs, curricular approaches, and materials for the special education teacher.

Prerequisite: Junior or senior standing

**70.451 METHODS FOR SECONDARY SPECIAL EDUCATION**

3 semester hours

Presents a student-centered workshop approach in analysis of methods, research, and philosophies currently in use in the teaching of special education students. Provides practice in the use of various teaching aids and machines related to student projects in secondary special classes.

Prerequisite: Junior or senior standing

**70.455 LEARNING DISABILITIES**

3 semester hours

A study of the characteristics and symptoms of specific learning disorders. Students are introduced to diagnostic and educational procedures used with learning disorders. Emphasis is on perceptual and conceptual factors in the development of language skills.

For individuals who have not had a previous course in learning disabilities.

**70.461 PROBLEMS IN SPECIAL EDUCATION**

3 semester hours

Presents instruction in the development of constructive teaching of exceptional individuals. Focuses on problems in the education of exceptional children. Discusses its relationship to teaching as each problem is defined. Helps the future teacher meet practical problems in guiding the exceptional individual in learning experiences at school.

Prerequisite: Concurrent with 70.401

**70.490 SPECIAL WORKSHOP****.491/.492**

3 semester hours

Utilizes temporary special workshop seminars designed to focus on contemporary trends and problems in the field of special education lectures, resource speakers, team teaching, field experiences, practicum, news media, and related techniques.

**CURRICULUM AND FOUNDATIONS****Faculty**

Professors Raymond E. Babineau, Nancy C. Gilgannon, Charlotte M. Hess, John R. Hranitz (assistant chairperson), Gorman L. Miller, Ann Marie Noakes, William S. O'Bruba (chairperson), Donald A. Vannan, David E. Washburn, Lynn A. Watson; Associate Professors Maurice A. Collins, Bonita B. Franks, Chris A. Cherrington, Martin M. Keller, Edward J. Poostay, R. Edward Warden; Assistant Professors Richard J. Donald, Donald L. Pratt, Robert L. Remaley, Lorraine A. Shanoski

**EARLY CHILDHOOD AND ELEMENTARY EDUCATION**

Three curricula are offered: a curriculum leading to the certification for kindergarten through grade 6 (designated K-6); a curriculum in early childhood education which leads to certification for nursery, daycare, preschool, kindergarten, and grades 1-3 (designated N-K-3); and a dual certification program combining the N-K-3 and the K-6 programs. See the department chairperson for specifics on the dual certification program.

**Early Childhood Education  
N-K-3 Certification**

William S. O'Bruba, coordinator

**A. General Education:** (See section on General Education Requirements and early childhood program sheets.)

**B. Academic Background Courses:** Mathematics, 6 semester hours; biology, 3 semester hours; physical science, 3 semester hours; 12 semester hours in social sciences elected from three of the groupings listed in the section on General Education Requirements, including at least 6 semester hours in composition and 3 semester hours in literature.

**C. Professional Education and Early Childhood Education Specialization:** (These courses are intended to develop knowledge of the nature of the child, the nature of the school, the learning process, general methods of teaching, and methods of teaching particular subjects and to provide student teaching experience.)

## **PROFESSIONAL EDUCATION**

### **Required courses (none pass/fail)**

- 60.201—Field Studies in Education I  
60.204—Educational Computing and Technology  
60.251—Psychological Foundations of Education  
60.291—Principles of Teaching  
60.301—Field Studies in Education II  
60.311—Educational Measurements and Evaluation  
60.375—Reading for the Socially Disadvantaged Child  
60.393—Social Foundations of Education  
(or 60.394 -Education in an Urban Society)  
62.121—Introduction to Early Childhood Education  
62.302—Teaching of Science in the Elementary School  
62.310—Teaching Fine Arts in the Elementary School  
62.322—Seminar in Learning Experiences with Young Children  
62.371—Teaching of Reading in the Elementary School  
62.373—Diagnostic and Remedial Reading  
62.390—Teaching of Social Studies in the Elementary School  
62.391—Teaching of Language Arts in the Elementary School  
62.398—Teaching of Mathematics in the Elementary School  
62.401—Student Teaching in Elementary and Early Childhood Education  
62.410—Workshop in Preschool Education  
70.101—Introduction to Exceptional Individuals

### **Elective courses (Minimum of 9-12 credits, none pass/fail)**

- 05.311—Methods and Materials in Elementary School Physical Education  
05.320—Health & Safety in the Elementary School  
20.351—Literature for Children  
30.205—Children's Art  
35.224—Class Piano I  
53.204—Measurement and the Metric System  
60.302—Research Literacy  
62.304—Environmental Education for the Elementary School Teacher  
62.373—Diagnostic and Remedial Reading  
62.376—Language Experiences for Children  
62.389—Individualizing Instruction Activities in the Elementary School  
62.400—Workshop in Teaching Mathematics in Early Childhood & Elementary Education  
62.480—A Study of Discipline in the Elementary School  
70.256—The Gifted Child

### **D. An area of concentration is optional**

### **E. Internship or free electives if necessary to complete the minimum graduation requirements.**

## **ELEMENTARY EDUCATION**

### **Kindergarten Through Grade 6 Certification**

#### **William O'Bruba, coordinator**

**A. General Education:** (See section on General Education Requirements and elementary education program sheets.)

**B. Academic Background Courses:** Mathematics, 6 semester hours; biology, 3 semester hours; physical science, 3 semester hours; 12 semester hours in social science elected from three of the groupings listed in the section on General Education Requirements including at least 6 semester hours in composition and 3 semester hours in literature.

**C. Professional Education and Elementary Specialization:** (These courses are intended to develop knowledge of the nature of the child, the nature of the school, the learning process, general methods of teaching, methods of teaching particular subjects and to provide student teaching experience.)

## **PROFESSIONAL EDUCATION**

### **Required courses (none pass/fail)**

- 60.201—Field Studies in Education I  
60.204—Educational Computing and Technology  
60.251—Psychological Foundations of Education  
60.291—Principles of Teaching  
60.301—Field Studies in Education II  
60.311—Educational Measurements and Evaluation  
60.375—Reading for the Socially Disadvantaged Child  
60.393—Social Foundations of Education or (60.394  
Education in an Urban Society)  
62.302—Teaching of Science in the Elementary School  
62.310—Teaching Fine Arts in the Elementary School or  
(35.311 Music in the Elementary School)  
62.371—Teaching of Reading in the Elementary School  
62.373—Diagnostic and Remedial Reading  
62.390—Teaching of Social Studies in the Elementary  
62.391—Teaching of Language Arts in the Elementary  
School  
62.398—Teaching of Mathematics in the Elementary  
School  
62.401—Student Teaching in Elementary and Early  
Childhood Education

**Elective courses**  
**(Minimum of 9 credits, none pass/fail)**

- 05.311—Methods & Materials in Elementary School Physical Education  
05.320—Health and Safety in the Elementary School  
20.351—Literature for Children  
30.205—Children's Art  
53.204—Measurement & the Metric System  
60.302—Research Literacy  
60.375—Reading for the Socially Disadvantaged Child  
62.121—Introduction to Early Childhood Education  
62.304—Environmental Education for the Elementary School Teacher  
62.310—Teaching Fine Arts in the Elementary School  
62.322—Seminar in Learning Experiences with Young Children  
62.373—Diagnostic and Remedial Reading  
62.376—Language Experiences for Children  
62.389—Individualizing Instruction Activities in the Elementary School  
62.400—Workshop in Teaching Mathematics in Early Childhood and Elementary Education  
62.410—Workshop in Preschool Education  
62.480—A Study of Discipline in the Elementary School  
70.256—The Gifted Child

**D. Area of Concentration is optional.**

**E. Internship or free electives if necessary to complete graduation requirements.**

## **EARLY CHILDHOOD EDUCATION AND ELEMENTARY EDUCATION**

### **Dual, Early Childhood and Elementary Education N-K-3, K-6 Certification**

**(William O'Bruba, coordinator)**

**A. General Education:** (See section on General Education Requirements and early childhood, and elementary education program sheets.)

**B. Academic Background Courses:** Mathematics, 6 semester hours; biology, 3 semester hours; physical science, 3 semester hours; 12 semester hours in social science elected from three of the groupings listed in the section on General Education Requirements including at least 6 semester hours in composition and 3 semester hours in literature.

**C. Professional Education Early Childhood and Elementary Specialization:** (These courses are intended to develop knowledge of the nature of the child, the nature of the school, the learning process, general methods of teaching, methods of teaching particular subjects and to provide student teaching experience.)

## **PROFESSIONAL EDUCATION**

**Required courses (none pass/fail)**

- 60.201—Field Studies in Education I  
60.204—Educational Computing and Technology  
60.251—Psychological Foundations of Education  
60.291—Principles of Teaching  
60.301—Field Studies in Education II  
60.311—Educational Measurements and Evaluation  
60.375—Reading for the Socially Disadvantaged Child  
60.393—Social Foundations of Education or (60.394 Education in an Urban Society)  
62.121—Introduction to Early Childhood Education  
62.302—Teaching of Science in the Elementary School  
62.310—Teaching of Fine Arts in the Elementary School  
62.322—Seminar in Learning Experiences with Young Children  
62.371—Teaching of Reading in the Elementary School  
62.373—Diagnostic & Remedial Reading  
62.390—Teaching of Social Studies in the Elementary School  
62.391—Teaching of Language Arts in the Elementary School  
62.398—Teaching of Mathematics in the Elementary School  
62.401—Student Teaching in Elementary and Early Childhood Education  
62.410—Workshop in Preschool Education  
70.101—Introduction to Exceptional Individuals

**Elective Courses**  
**(Minimum of 9 credits, none pass/fail)**

- 05.311—Methods & Materials in Elementary School Physical Education  
05.320—Health and Safety in the Elementary School  
20.351—Literature for Children  
30.205—Children's Art  
53.204—Measurement & the Metric System  
60.302—Research Literacy  
62.304—Environmental Education for the Elementary School Teacher  
62.376—Language Experiences for Children  
62.389—Individualizing Instruction Activities in the Elementary School  
62.400—Workshop in Teaching Mathematics in Early Childhood and Elementary Education  
62.480—A Study of Discipline in the Elementary School  
70.256—The Gifted Child

**D. Area of Concentration is optional.**

**E. Internship or free electives if necessary to complete graduation requirements.**

## **COURSE DESCRIPTIONS**

### **Early Childhood and Elementary Education (Code 62)**

#### **62.121 INTRODUCTION TO EARLY CHILDHOOD EDUCATION**

**3 semester hours**

Examines the historical and philosophical foundations of early childhood education. Analyzes current trends and practices for teaching children from the ages of birth to six.

#### **62.302 TEACHING OF SCIENCE IN THE ELEMENTARY SCHOOL**

**3 semester hours**

Emphasizes the major methods and materials used in elementary school science.

Prerequisite: 3 semester hours in biology and 3 semester hours in physical science

#### **62.304 ENVIRONMENTAL EDUCATION FOR THE ELEMENTARY SCHOOL TEACHER**

**3 semester hours**

Provides learning experiences for the elementary school level in environmental education programs.

#### **62.310 TEACHING FINE ARTS IN THE ELEMENTARY SCHOOL**

**3 semester hours**

Provides competencies in the selection and implementation of materials and procedures for teaching the literary, visual, and performing arts to elementary school children. Emphasizes the comprehension and integration of the fine arts into all areas of the school curriculum.

#### **62.322 SEMINAR IN LEARNING EXPERIENCES WITH YOUNG CHILDREN**

**3 semester hours**

Outlines the physical, mental, emotional, and social levels of children from birth to age 8, with attention to environmental factors that foster child growth. Examines pre-school and kindergarten programs to meet the needs of this age child and to provide the background of experience needed for later ventures into reading, arithmetic, science, social studies, music, art, literature, physical education, and health.

Prerequisite: 48.101, 211

#### **62.371 TEACHING OF READING IN THE ELEMENTARY SCHOOL**

**3 semester hours**

Examines developmental reading from readiness through grade 6.

Prerequisite: 45 semester hours

#### **62.373 DIAGNOSTIC AND REMEDIAL READING**

**3 semester hours**

Presents diagnostic and remedial procedures emphasizing both standardized and informal techniques.

Prerequisite: 62.371, 370

#### **62.376 LANGUAGE EXPERIENCES FOR CHILDREN**

**3 semester hours**

Explores the language development of children and factors that influence skill in effective communication development from nursery school through sixth grade. Provides a background for students in language arts and literature for children.

#### **62.389 INDIVIDUALIZING INSTRUCTION ACTIVITIES IN THE ELEMENTARY SCHOOL**

**3 semester hours**

Emphasizes procedures for helping individuals learn the informal school concept and rearranging the elementary classroom into an efficient and effective learning area with emphasis on a language arts center, mathematics center, science centers, and social studies centers.

#### **62.390 TEACHING OF SOCIAL STUDIES IN THE ELEMENTARY SCHOOL**

**3 semester hours**

Emphasizes methods and materials appropriate for teaching elementary school social studies in contemporary society.

#### **62.391 TEACHING OF LANGUAGE ARTS IN THE ELEMENTARY SCHOOL**

**3 semester hours**

Emphasizes methods and materials designed to help elementary school children develop communication skills for today's complex society. Includes all areas of a modern language arts curriculum.

#### **62.398 TEACHING OF MATHEMATICS IN THE ELEMENTARY SCHOOL**

**3 semester hours**

Outlines mathematical methods, materials, understandings, and attitudes essential in the teaching of contemporary programs in the elementary school.

Prerequisite: 6 semester hours in mathematics

#### **62.400 WORKSHOP IN TEACHING MATHEMATICS IN EARLY CHILDHOOD AND ELEMENTARY EDUCATION**

**1-6 semester hours**

Presents a workshop format designed to provide individual or group study of problems concerned with the teaching of mathematics at the early childhood and elementary levels.

**62.401 STUDENT TEACHING IN ELEMENTARY AND EARLY CHILDHOOD EDUCATION**  
**12 semester hours**

Provides opportunities for direct participating experiences. Places students in classrooms with public or private school teachers. The major(s) of the students determine one of the following assignments: K-6—one experience in a primary level and one experience in an intermediate level of a public school and N-K-3—one experience in a preschool situation and one in a primary level of a public school or two experiences in a primary level of a public school.

**62.410 WORKSHOP IN PRESCHOOL EDUCATION**  
**1-6 semester hours**

Provides teachers with a workshop experience in infant day care centers and nursery schools. Provides methods and materials that they can construct and utilize within their centers and classrooms. Theories of Bruner, Piaget, Froebel, and Montessori will be examined.

**62.431 INDEPENDENT STUDY IN ELEMENTARY EDUCATION**

**3 semester hours**

Individual projects in education. Consent of the department chairperson to schedule is required.

**62.480 A STUDY OF DISCIPLINE IN THE ELEMENTARY SCHOOL**

**3 semester hours**

Emphasizes techniques designed to modify behavior in a positive way.

**SECONDARY EDUCATION**  
**Grades 7-12 Certification**

**William O'Bruba, coordinator**

Secondary Education is a major planned to offer academic, cultural, and professional experience significant to the personal and professional competence of a beginning teacher of a subject area in the secondary schools.

The curriculum requirements comprise general education, professional education, and the subject area concentration as follows:

**A. General Education:** (See section on General Education Requirements and area of specialization program sheets.)

**B. Professional Education:** (See course descriptions for prerequisites of these courses.)

60.201 Field Studies in Education 1	1 semester hour
60.204 Education Computing and Technology	3 semester hours
60.251 Psychological Foundations of Education	3 semester hours

60.291 Principles of Teaching	3 semester hours
60.301 Field Studies in Education II	1 semester hour
60.311 Educational Measurements and Evaluation	3 semester hours
60.393 Social Foundations of Education	3 semester hours
65.351 to 360 (Appropriate subject matter methods course)	3 semester hours
65.374 Teaching of Reading in Academic Subjects	3 semester hours
65.402 Student Teaching in the Secondary School	12 semester hours

**C. Area of Specialization:** Each area of specialization is designed to develop scholarship basic to teaching the subject and to a degree governed by the limits of time and the discrimination of the subject in choosing electives basic to graduate study. The requirements for each area of specialization follow.

**D. Free Electives:** if necessary to complete the minimum graduation requirements of 128 semester hours.

**Areas of Specialization in SECONDARY EDUCATION**

**BIOLOGY**

Biology 50.110+, 220+, 332, 351, 380; Chemistry 52.111+, 112+; 113, 230+, 341+; plus 15 semester hours elective in biology (including 3 semester hours in a field course other than ecology).

+—Can be used to satisfy general education requirements.

Note—Students with a strong background and above average math SAT score may skip 52.101 by satisfactory performance on a standardized test administered by the Chemistry Department.

**CHEMISTRY**

Chemistry 52.111+, 112+ or 118+, 113+, 221, 231, 232, 252, 361, 362, 481; Physics: 54.211+, 212+; Mathematics: 53.125+, 126+, 175, 225.

+—Can be used to satisfy General Education requirements.

**COMMUNICATIONS/MEDIA**

English 20.302, 311, 312; Theater Arts 26.102+; Mass Communications 27.315; one course in World Literature: Group 1—Mass Communications 27.210, 310, 415; Group 2—Choose two courses from this group: Mass Communications 27.190, 230, 251, 261, 270; Group 3—Choose three courses from this group: Mass Communications 27.271, 334, 336, 352, 364, 371, 435, 469, 482; Group 4—Elective courses.  
+—Can be used to satisfy General Education requirements.

## **COMMUNICATIONS /SPEECH**

Theater Arts 26.102; English 20.302, 311, 312; one course in World Literature; one course in Mass Communications; Note: 25.103 Public Speaking is required of all secondary education majors and is listed under General Education required communication course. Communication Studies 25.104+, 206+, or 241+, 205+ or 215 or 315; Choose one from this list: Theater Arts 26.211, 215, 316, 416; Select four speech courses from the 25 code course listings. Note: 25.108 may not be taken to fulfill this group of courses. Communication Studies 25.108; A minimum of one semester's participation in the Bloomsburg University Forensic Society is required for all Speech/Communication majors. A grade of pass/fail will be issued.  
+ -- Can be used to satisfy General Education requirements.

## **COMMUNICATIONS /THEATER**

Theater Arts 16.102; English 20.301, 311, 312, one course in World Literature, one course in Mass Communication. Note: 25.103 Public Speaking is required of all secondary education majors, and is listed under General Education required communication course. Communication Studies 25.206+ or 241+; Theater Arts 26.211, 215 or 416 or 316. Select four theater courses from the 26 code course listings.  
Note: 25.108 may not be taken to fulfill this group of courses. Theater Arts 26.108; A minimum of one semester's participation in the Bloomsburg University Players is required for all Theater/Communication majors. A grade of pass/fail will be issued.  
+— Can be used to satisfy General Education requirements.

## **EARTH AND SPACE SCIENCE**

Earth Science 51.101+, 102+, 111+, 112+, 253, 255, 259; Chemistry 52.111+, 112+, 113+; Physics 54.111+, 112+; Mathematics 53.175; one course selected from the following mathematics courses: 53.112, 113+, 123+, 125+, 126+; Selection of three additional courses from the following: Earth Science 51.105+, 261, 262, from the Marine Science Consortium (55) (maximum 9 credits).  
+—Can be used to satisfy general education requirements.

## **ENGLISH**

Requires 12 credits from three categories. (Each category must be taken at least once.)  
Category I—English 20.120+, 121+.  
Category II—English 20.220+, 221+.  
Category III—English 20.222, 223 plus English 20.302, 311, 312, 363.  
A total of 15 semester hours of elective courses (300 or 400 level) in English; only one from 20.301, 303, 304, 305.  
+—Can be used to satisfy general education requirements.

## **FRENCH**

French 10.103+, 104+, 109+, 201+, 202+, 203+, 211+ or 212+; Selection of 9 elective hours from French Culture and Civilization, Language or Literature.  
+—Can be used to satisfy general education requirements.  
Note: Students exempted from any required course(s) will substitute advanced electives in French.

## **GENERAL SCIENCE**

Biology 50.110+, 120+; Chemistry 52.111+ or 118+, 112+ or 118+, 113+; Physics 54.110 +111+ or 211+, 112+ or 212+; Earth Science; 51.101+, 111, 259+; Mathematics 53.123, 141 or 241 Philosophy 28.303; History 42.250.  
+—Can be used to satisfy General Education requirements.

## **MATHEMATICS**

Mathematics 53.125+, 126+, 177, 185, 225, 226, 231, 310, 314, 360; Selection of 9 semester hours from the following: (Must include one computer course). Any mathematics course numbers 271 and above.  
+—Can be used to satisfy General Education requirements.

## **PHYSICS**

Physics 54.211+, 212+, 302, 310, 314, 400; Chemistry 52.111+, 112+, 113+, 125+, 126+, 225, 322; Mathematics 53.125, 126, 225, 322. Selection of 6 elective hours in physics from the following: 54.301, 304, 315, 318, 421, 422, 480, 490, 491, 493.  
+—Can be used to satisfy General Education requirements.

## **SPANISH**

Spanish 12.103+, 104+, 109+, 201+, 202+, 203+, 211+, or 212+. Selection of 9 elective hours from Spanish Culture and Civilization, Language or Literature.  
+—Can be used to satisfy general education requirements.  
Note: Students exempted from any required course(s) will substitute advanced electives in Spanish.

## **COMPREHENSIVE SOCIAL STUDIES**

### **ANTHROPOLOGY**

Anthropology 46.200+; Sociology 45.211+; Economics 40.211+, 212+; History 42.112+, 113+, 121 (221)+, 122 (222)+; Geography 41.101+, 102+; Political Science 44.101+, 161+; Anthropology 46.210, 220, 340, 390, 440.  
+—Can be used to satisfy general education requirements.

## ECONOMICS

Anthropology 46.200+; Sociology 45.211; Economics 40.211+, 212+; History 42.112+, 113+, 121 (221)+ or 122 (222)+; Geography 41.101+, 102+; Political Science 44.101+, 161+; Economics 40.422 or 423; Selection of 15 hours in Economics from the following: 40.311, 312, 313, 315, 316, 346, 410, 413, 424, 433, 434.

+—Can be used to satisfy General Education requirements.

## GEOGRAPHY

Anthropology 46.200+; Sociology 45.211+; Economics 40.211+, 212+; History 42.112+, 113+, 121 (221)+ or 122 (222)+; Geography 41.101+, 102+; Political Science 44.101+, 161+; Psychology 48.101+. Selection of 18 hours from Geography. Selection of 3 elective hours in economics, sociology, psychology, political science, or history.

+—Can be used to satisfy General Education requirements.

## HISTORY

Anthropology 46.200+; Economics 40.211+, 212+; History 42.121 (221)+, 122; Geography 41.101+, 102+; Political Science 44.101+, 161+; History 42.398; SPECIALIZATION: Economics 42.141, 142, 143, 144, 452, required, choose any one of the following 3 credit courses: History 42.372, 379, 381, 383, 385, 391; required, choose any one of the following 3 credit courses: History 42.133, 319, 320, 326, 327, 328.

+—Can be used to satisfy General Education requirements.

## PHILOSOPHY

Anthropology 46.200+; Sociology 45.211+; Economics 40.211+, 212+; History 42.112+, 113+, 121 (221)+; Geography 41.101+, 102+; Political Science 44.101+, 161+; Philosophy 28.211, 212, 220, 310, 312 or 351; 1 elective chosen from philosophy offerings.

+—Can be used to satisfy General Education requirements.

## POLITICAL SCIENCE

CORE: Anthropology 46.200+; Sociology 45.211+; Economics 40.211+, 212+; History 42.112, 113+, 121 (221)+ or 122 (222); Geography 41.101+, 102+; Political Science 44.101+, 161+; SPECIALIZATION: Selection of 3 semester hours from each of the following groups:

A. Political Theory and Methodology: Political Science 44.108+, 405, 409, 412;

B. American Government and Politics: Political Science 44.244, 322, 323, 324, 326, 336, 437, 438, 440, 445, 446, 447, 448, 452, 456, 458;

C. International Politics: Political Science 44.181+, 383, 487;

D. Comparative Politics: Political Science 44.271, 366+, 371, 376, 463, 464;

Political Science electives. Selection of 6 elective hours from any of the above groups.

+—Can be used to satisfy General Education requirements.

## PSYCHOLOGY

Anthropology 46.200+; Sociology 45.211+; Economics 40.211+, 212+; History 42.112+, 113+, 121 (221)+, 122 (222)+; Geography 41.101+, 102+; Political Science 44.101+, 161+; Psychology 48.160+, 281, 451, 476, 251. Selection of 6 elective hours in psychology.

+—Can be used to satisfy General Education requirements.

## SOCIOLOGY

Anthropology 46.200+; Sociology 45.211+; Economics 40.211+, 212+; History 42.112+, 113+, 121 (221)+, 122 (222)+; Geography 41.101+, 102+; Political Science 44.101+, 161+; Sociology 45.213, 113 or 236, 216 or 462, 231 or 318 and 6 credits from any of the above sociology courses not previously taken.

+—Can be used to satisfy general education requirements.

## COACHING IN SECONDARY SCHOOLS

The following courses are recommended to be elected by students who expect to coach athletics in addition to teaching in their field of concentration: Physical Education 05.242, 430; one or two courses from 05.251, 252, 253, 256, 257, 260. Completion of these courses does not lead to certification.

## **COURSE DESCRIPTIONS**

### **Secondary Education (Code 65)**

#### **65.351 TEACHING OF COMMUNICATION IN THE SECONDARY SCHOOL**

**3 semester hours**

(Offered fall semester only.)

#### **65.352 TEACHING OF MATHEMATICS IN THE SECONDARY SCHOOL**

**3 semester hours**

(Offered spring semester only.)

#### **65.353 TEACHING OF SCIENCE IN THE SECONDARY SCHOOL**

**3 semester hours**

(Offered fall semester only.)

#### **65.355 TEACHING OF SOCIAL STUDIES IN THE SECONDARY SCHOOL**

**3 semester hours**

(Offered fall semester only.)

#### **65.358 TEACHING OF FOREIGN LANGUAGE IN THE SECONDARY SCHOOL**

**3 semester hours**

(Offered spring semester only.)

Prerequisites for 65.351 to 65.358: Psychology 48.101, Education 60.201, 251, .291, 301, 393; and junior standing in one of the areas of concentration in Secondary Education.

#### **65.374 TEACHING OF READING IN ACADEMIC SUBJECTS**

**3 semester hours**

Understanding techniques for developing reading skills applicable to the secondary school. Emphasis on readiness, comprehension, silent reading, and oral reading through secondary school academic subjects.

#### **65.402 STUDENT TEACHING IN THE SECONDARY SCHOOL**

**12 semester hours**

Students are assigned to public schools where they work with selected classroom teachers and college supervisors in teaching experiences. Students follow the same schedule and assume the same responsibilities as their cooperating teachers.

#### **65.411 SEMINAR IN SECONDARY EDUCATION**

**3 semester hours**

Activities center around concerns and problems encountered in secondary education. The range of activities is determined by individual need and by levels of professional competency including diagnosis, mutual development of objectives, and self evaluation.

#### **65.431 INDEPENDENT STUDY IN SECONDARY EDUCATION**

**1-3 semester hours**

Consent of the department chairperson required.

## **EDUCATIONAL FOUNDATIONS**

Although it offers no major degree programs, educational foundations provides academic support services for all teacher education programs.

## **COURSE DESCRIPTIONS**

### **Educational Foundations (Code 60)**

#### **60.201 FIELD STUDIES IN EDUCATION I**

**1 semester hour**

Field trips to observe various teaching-learning situations. Students will be required to develop competence in operating all audio-visual equipment. On-campus seminars by arrangement with the course instructor.

#### **60.204 EDUCATIONAL COMPUTING AND TECHNOLOGY**

**3 semester hours**

An introduction to computer technology and the school setting that utilizes computers.

#### **60.251 PSYCHOLOGICAL FOUNDATIONS OF EDUCATION**

**3 semester hours**

Reviews psychological foundations of education, individual differences, learning theories applied to classroom situation, physical and mental growth, personality development, and mental hygiene.

#### **60.291 PRINCIPLES OF TEACHING**

**3 semester hours**

This course is designed as a competency-based course enabling the student to develop an awareness of the teaching process as it sequentially develops. Various instructional methodologies, techniques, and approaches will be explored and major topics will include: Specifying instructional/behavioral objectives, sequencing learning activities, applying the various taxonomies, conducting micro-teaching, discipline strategies, questioning techniques, and mastery teaching. Class term project will include unit, lesson plan, and evaluative instrument construction.

#### **60.301 FIELD STUDIES IN EDUCATION II**

**1 semester hour**

Active involvement in a school setting two to three hours per week for approximately 10 weeks. Remaining time spent in campus class seminars by arrangement with course instructor.

#### **60.302 RESEARCH LITERACY**

**3 semester hours**

This course is designed to provide the undergraduate student with an introduction to research methods and techniques. The major objectives are to give the student the basic understanding to be a better consumer of research, to be more aware of the value of research, and to be able to carry out beginning-level research projects.

**60.311 EDUCATIONAL MEASUREMENTS AND EVALUATION**

**3 semester hours**

Reviews principles of evaluation; grading; representative standardized tests; vocabulary of measurement, test construction, and interpretation; informal and formal measurement in the cognitive, affective, and psychomotor areas.

**60.375 READING FOR THE SOCIALLY DISADVANTAGED CHILD**

**3 semester hours**

Addresses methods and materials for the instruction of the disadvantaged child (K-12). Presents techniques and theories as they may be applied to help the socially disadvantaged child function more adequately in the school environment. Open to all majors including secondary education.

Prerequisite: 45 semester hours

**60.393 SOCIAL FOUNDATIONS OF EDUCATION**

**3 semester hours**

Reviews the social processes underlying education, current social forces, the place of the school in American culture, impact of social stratification, role of the teacher in a period of rapid social change.

Prerequisite: Junior standing

**60.394 EDUCATION IN AN URBAN SOCIETY**

**3 semester hours**

Studies the formal educational settings which serve areas in the United States with high population densities and the social factors which influence education in these settings. Fulfills the social foundations requirements for certification

**60.431 INDEPENDENT STUDY**

**1-3 semester hours**

Consent of the department chairperson to schedule is required.

**60.441 WORKSHOP IN EDUCATION**

**.442/.443**

**1-6 semester hours**

Studies selected areas of education including research by individual students in a special teaching field.

**60.451 PUPIL PERSONNEL SERVICES IN THE PUBLIC SCHOOL**

**3 semester hours**

A comprehensive view of pupil personnel services in elementary and secondary schools; school attendance, school health programs, pupil transportation, psychological services, and guidance services.

# School of Health Sciences

## Allied Health Sciences

Lauretta Pierce, director

### Department of Biological and Allied Health Sciences

James E. Cole, coordinator

The allied health sciences encompass those health areas in which individuals support, aid, and increase the efficiency and effectiveness of other health care professionals by becoming a contributing member of the health care team. The curricula offered at Bloomsburg include medical technology, radiologic technology, health services associate, dental hygiene, pre-occupational therapy, pre-physical therapy, and pre-cytotechnology. Completion of these programs involves clinical education and experience—usually away from the campus. The university offers degrees for the first four curricula, namely a bachelor's degree for medical technologists and radiologic technologists, an associate degree in health services, and a Bachelor of Science degree in education for dental hygienists. Radiologic technology, health services associate, and the dental hygiene curricula are advanced entry programs.

An affiliation with Thomas Jefferson University's College of Allied Health Sciences in Philadelphia facilitates transfer of students from the preparatory curricula of physical therapy, occupational therapy, and cytotechnology into baccalaureate programs there. Bloomsburg University is an active participant in the P.A.C.E. program sponsored by Thomas Jefferson University.

## MEDICAL TECHNOLOGY CURRICULUM

James E. Parsons, program director

The medical technology program consists of a minimum of 96 semester hours of courses prescribed by the university, followed by one calendar year of clinical education in a medical technology program accredited nationally by the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association (AMA) through the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). Bloomsburg University has formed affiliations with the following programs: Abington Memorial Hospital (Abington), The Allentown Hospital (Allentown), The Bryn Mawr Hospital (Bryn Mawr), The Chester County Hospital (West Chester), Divine Providence Hospital (Williamsport), Geisinger Medical Center (Danville), Harrisburg Hospital (Harrisburg), Lancaster General Hospital (Lancaster), Nazareth Hospital (Philadelphia), Polyclinic Medical Center (Harrisburg), The Reading Hospital & Medical Center (Reading), Robert Packer Hospital (Sayre), Rolling Hill Hospital (Elkins Park), Sacred Heart Hospital (Allentown), Saint Joseph Hospital (Reading), Scranton Medical Technology Consortium (Scranton), University of Virginia Medical Center (Charlottesville),

Wilkes-Barre General Hospital (Wilkes-Barre), and York Hospital (York).

Students enrolling in the curriculum leading to the Bachelor of Science degree will be admitted under the same policy governing other applicants to Bloomsburg University. These requirements may be found under the section on Admission and Readmission. (See table of contents.)

Assistance in making application for admission to the clinical year program is offered by the university, but admission as well as fees for that program is determined solely by that institution. The university cannot guarantee that any student will be accepted for the clinical education portion of the program. In general, students with the highest academic achievement, those who interview well, as well as those with a history of volunteer work are given priority. Knowledge of the field and home location in proximity to a given institution often play an important part in the selection process.

Students who successfully complete all of the requirements and the clinical year program shall receive the Bachelor of Science degree. All clinical year graduates will become eligible to take the certification examinations for medical technologists. Upon successfully completing one or both of these examinations, the student will be awarded a certificate of registry and the designation Medical Technologist, M.T. (ASCP) or Clinical Laboratory Scientists, C.L.S. (NCA).

A student who fails to gain admission to a clinical program at the end of the junior year (3+1 program) or senior year (4+1 program) or wishes to complete a degree prior to entering the clinical experience may remain at the university and complete the requirements for a baccalaureate degree. Ordinarily, the student can complete the bachelor of arts degree in biology in one additional year; other curricula may require more time.

The course requirements of the medical technology program are:

**A. General Education:** (See the section on General Education Requirements.)

**B. Specialization:** Biology 50.107, 110 or 120, 242, 243, 233, or 332, 342, 343, and 371 or 472; Chemistry 52.111, 112, or 118, 113, 221, Option I (230 + 341) or Option II (231 + 232); Mathematics 53.141 and 53.175; Physics 54.107.

**C. Elective Courses:** To complete at least 96 semester hours.

**D. Clinical Experience:** From the following list of courses, 32 semester hours of credit with their appropriate grades will be awarded:

## **COURSE DESCRIPTIONS**

### **Medical Technology**

(Code 86)

#### **86.401 CLINICAL MICROBIOLOGY**

**6-10 semester hours**

A lecture and laboratory study of bacteria, fungi, parasites, and viruses which cause disease in man, their clinical pathology, and related diagnostic laboratory procedures.

#### **86.402 CLINICAL HEMATOLOGY/ COAGULATION**

**6-10 semester hours**

A lecture and laboratory study of hematopoiesis and blood coagulation. Objectives of this course are to enable the student to acquire an understanding of the theory of hematological tests, skills in the performance of these tests, knowledge of blood disorders, and an insight into the significance of test results.

#### **86.403 CLINICAL CHEMISTRY FOR MEDICAL TECHNOLOGISTS**

**6-10 semester hours**

Lecture and laboratory study of enzymes, carbohydrates, lipids, proteins, nitrogenous end products, electrolytes, acid-base balance, body fluids, toxicology, endocrinology, and urinalysis. The lecture series includes anatomy, physiology, methods of analysis, and clinical significance of each biochemical determination. The laboratory study includes standardization and quality control of procedures using spectrophotometry, chromatography, electrophoresis, and automated techniques.

#### **86.404 CLINICAL IMMUNOHEMATOLOGY**

**3-6 semester hours**

Lecture and laboratory study of blood groups, genetics, antigens, and antibodies and their interaction as related to safe transfusion, prediction of immune incompatibilities, and probability of parentage. Donor collection, processing, blood component preparation, and therapy also are studied.

#### **86.405 CLINICAL IMMUNOLOGY/ SEROLOGY**

**2-4 semester hours**

Lecture and laboratory study of immunological concepts and theory and their relation to serologic reactions and clinical interpretations.

#### **86.406 CLINICAL SEMINAR**

**1-6 semester hours**

Other courses which are not included in the above (such as orientation, laboratory management, education, clinical microscopy) and/or are unique to the individual hospital program.

## RADIOLOGIC TECHNOLOGY CURRICULUM

James E. Cole, program director

Radiologic technologists are allied health professionals who have expertise in the operation of x-ray equipment and the preparation of patients for various diagnostic procedures. Recent trends indicate that many clinically educated technologists will pursue managerial or teaching roles within their disciplines.

In order to meet the varying needs of radiologic technologists, the program offers them a means of entering Bloomsburg at an *advanced entry level*. Students are required to select a group of courses comprising either a management emphasis or an education emphasis.

Students entering at this advanced level are awarded 60 credits for satisfactory completion of an AMA-approved program and the passing of the ARRT examination. A listing of required courses follows. It is assumed that most advanced level students will be part time and will require more than two years to complete their program. The number of credits for graduation in this program is 137. At least 64 credits must be taken at a four-year college or university (32 credits must be from Bloomsburg University.)

The required third and fourth year courses comprise an allied health core similar to that taken by other allied health majors. Assistance in choosing the proper courses is given by the program director for radiologic technology.

**A. General Education:** (See the section on General Education Requirements.)

**B. Specialization:** Biological and Allied Health Sciences 50.110, 173 and 174; Chemistry 52.101; Physics 54.107; Mathematics 53.141 and 175 or Psychology 48.160 and Computer and Information Science 92.150

**C. Emphasis Courses (Management or Education):** Management 90.101, 91.220, 93.344, 345, 346, or 445 or 50.282; Education 60.204, 251, 291, 311, and 393.

**D. Professional Requirement:** 89.300  
60 credits awarded for satisfactory completion of an AMA-approved program in radiologic technology and the passing of the ARRT examination.

## HEALTH SERVICES ASSOCIATE CURRICULUM

James E. Cole, program director

This *advanced entry* degree program is available to health workers who have obtained clinical education from an accredited health agency and who desire additional education in communicative and interpersonal skills. Its initiation was encouraged by the fact that many certified health workers are now being strongly encouraged to continue their education in a collegiate setting. Also, the role of the health workers has

expanded to include greater responsibility in the hospital and nursing home setting as well as a more substantial commitment to community health. Health workers who may wish to enter the program include medical laboratory technicians, licensed practical nurses, histologic technicians, and laboratory assistants, i.e., those workers who have satisfactorily completed the equivalent of one year's clinical education.

It is assumed that most students will be taking courses on a part-time basis and will require more than two years to complete the program.

Candidates for the associate degree must have satisfactorily completed 22 credits of course work (maintained a 2.0 QPA or better) and have proof of satisfactory completion of a clinical program. Awarding of this associate degree is contingent upon being accepted for candidacy and completion of the program while maintaining academic good standing. Transfer credits from other accredited institutions are, of course, accepted, but at least 15 credits must be from Bloomsburg University.

**A. General Requirements:** 51 credits—English 20.101 and 200 or 201 or English 104; Mathematics—any of the seven courses from 53.101 to 53.141 or 48.160; Speech 25.103 or 104; Sociology 45.211; Psychology 48.101, 211 or 110, 251 and 311 or 45.490; Chemistry 52.101 and 113; Biological and Allied Health Sciences 50.107, 173, 174, and 240 or 242; 50.243 is highly recommended. Also, a course in nutrition (50.205), health care leadership, 50.282 or its equivalent (93.344), and an elective.

**B. Professional Requirements:** 12 credits—Proof of certification or licensure as a health worker

## DENTAL HYGIENIST CURRICULUM

James E. Cole, program director

The degree, Bachelor of Science in Education, will be conferred upon dental hygienists meeting the following requirements:

1. Possession of a valid license to practice dental hygiene in the Commonwealth of Pennsylvania issued by the State Dental Council and Examining Board and the Department of Education. The professional education requirements for dental hygiene are the satisfactory completion of an approved two-year (not less than 30 hours each week) dental hygienist course of instruction or its equivalent and graduation from a dental hygiene school approved by the State Dental Council and Examining Board.
2. The satisfactory completion of at least 70 credit hours of professional and general education courses.

**A. General Education:** (See the section on General Education Requirements.) English 20.201; Speech Communication 25.104; Mathematics 53.141 or Psychology 48.160.

**B. Professional education:** (19 hours)  
Psychology 48.110, 211, and 271 or Psychological Foundations of Education 60.251; Educational Foundations 60.204 and 393; Management 93.344 or a course in Health Care Leadership; Education 79.312 (Internship in Education)

**C. Free electives (Recommended):** Mathematics 53.174 or Computer and Information Systems 92.150; Psychology 48.311; Anthropology 46.390

## PRE-OCCUPATIONAL THERAPY, PRE-PHYSICAL THERAPY, AND PRE-CYTOTECHNOLOGY CURRICULA

James E. Cole, program director

Cynthia A. Surmacz, advisor

Requirements for admission to professional schools of physical therapy, occupational therapy, and cytotechnology vary. Entrance into professional schools usually follows two to four years of undergraduate preparation. Hence, the student is encouraged to design a program which may lead to a baccalaureate degree at Bloomsburg University.

The opportunity to obtain a baccalaureate degree in physical therapy, occupational therapy, or cytotechnology has been greatly enhanced as a result of an affiliation agreement between Bloomsburg University and Thomas Jefferson University's College of Allied Health Sciences. This affiliation facilitates transfer to upper-division degree programs at Thomas Jefferson University for students who have completed a minimum of two years preparatory education at Bloomsburg University. *Satisfactory completion of the "2+3" program in physical therapy results in the awarding of a baccalaureate and masters degree by Thomas Jefferson University.* These "2 + 2" or "2 + 3" arrangements provide the advantage of offering a quality, reasonably priced education at a rural university combined with training at a major medical center in Philadelphia.

## NURSING

### Faculty

Professors Gladys Ancrum, Nancy A. Onuschak, Lauretta Pierce (Chairperson); Associate Professors M. Christine Alichnie (Assistant Chairperson), Mary A. Gavaghan, Eloise J. Hippenstein, Carolyn M. Dalton (part-time nutritionist), Bernadine T. Markey, Dorette E. Welk; Assistant Professors Jean E. Berry, Robert L. Campbell, Sandra E. Girton, Jean K. Kalat, Sharon S. Kribbs, Cathy E. Livengood, Alexis Bulka Perri, Joan B. Stone, Patricia B. Torsella, L. Patricia Zong; Instructors, Mary Ann Cegielsky, Mary Tod Gray, Thelma L. Lohr, Gloria J. Schechterly

### Degree and Licensure

Successful completion of the baccalaureate nursing  
150/COLLEGE OF PROFESSIONAL STUDIES

program leads to the Degree, Bachelor of Science in Nursing (B.S.N.). After earning the baccalaureate degree, graduates who are not registered nurses take the registered nurse examination for licensure by any State Board of Nursing. When students are employed in health agencies, they may not be employed as registered or practical nurses unless they are currently licensed.

In accordance with the Jan. 1, 1986 Professional Nursing Law (P.L. 317, No. 69), felonious acts prohibit licensure in Pennsylvania in accordance with the following guidelines.

The Pennsylvania State Board of Nursing shall not issue a license or certificate to an applicant who has been:

1. convicted\* of a felonious act prohibited by the act of April 14, 1972 (P. L. 233, No. 64) known as "The Controlled Substance, Drug, Device, and Cosmetic Act," or
2. convicted\* of a felony relating to a controlled substance in a court of law of the United States or of any other state, territory, or country unless
  - a. at least 10 years have elapsed since the date of conviction;
  - b. the applicant satisfactorily demonstrated to the board significant progress in personal rehabilitation since the conviction such that licensure should not create a substantial risk of further violations; and
  - c. the applicant otherwise satisfies the qualifications contained in this act.

A person convicted of any felonious act may be prohibited from licensure by the Pennsylvania State Board of Nursing at any time.

\*Convicted includes a judgment, an admission of guilt, or a plea of nolo contendere.

### Accreditation

The Bachelor of Science in Nursing (BSN) program is accredited by the National League for Nursing and approved by the Pennsylvania State Board of Nursing.

### Purpose of the Program

The purpose of the baccalaureate program in nursing at Bloomsburg University is to provide learning opportunities in nursing and related disciplines which enable the student to attain attitudes, knowledge, and skills essential to role development of a beginning practitioner. The graduate utilizes critical thinking, responsible decision making, and independent judgement through use of the nursing process to provide health care to a diverse and multicultural society in a variety of health care settings. The program provides a foundation for further education and lifelong learning activities.

## Admission to Nursing Program

Two categories of applicants are available:

1. Freshman students—a current high school student or a high school graduate without previous postsecondary experience (formal education after high school).
2. Transfer Candidates—an applicant previously enrolled at Bloomsburg University or enrolled in a postsecondary educational program.

### Admission Requirements and Process

1. Freshmen students— Information supplied in Application Procedures and Criteria for Evaluation applies for these candidates. Students currently in high school should apply to the Bloomsburg University Office of Admissions early in their senior year. Graduates from high school who have no formal education after high school, must apply through the Bloomsburg University Office of Admissions early in November to be considered for spring semester or early in February to be considered for fall semester admission.

The following guidelines are used to consider freshman candidates for admission to the Bachelor of Science in Nursing program.

- a. 18 academic units from high school. These units must include a minimum of 4 units of English, 3 units of social studies, 2 units of mathematics (1 of which is algebra), and 2 units of science with a related laboratory or the equivalent, plus 7 other academic units in grades 9 through 12.
- b. "B" high school average or above.
- c. "A" or "B" in high school chemistry.
- d. 950 SAT's with a minimum of 450 in each portion.
- e. Upper 25% of high school class.

It is important that the candidate indicate nursing as the major. The Office of Admissions uses these guidelines in accepting freshman students directly into the nursing program. The nursing faculty consult with the Office of Admissions as necessary regarding candidates for admission. An interview is not required, but the Department of Nursing faculty are available to talk with prospective candidates upon request.

#### 2. External transfer candidates—

- a. Candidates with college credits from institutions other than Bloomsburg University must apply directly to the Office of Admissions. The information supplied in Application Procedures and Criteria for Evaluation and Transfer Students applies to these candidates.

The Office of Admissions reviews the application and evaluates the credits from the transcripts submitted and if the candidate meets the requirements for transfer into the university, the application is forwarded to the Department of Nursing\*. The Department Chairperson and the Student Admission, Progression, and Retention (SAPR) Committee review the application for admission to the baccalaureate nursing program. The minimum requirements beyond those for admission to the university are a QPA of 2.5 and evidence of a minimum grade of "C" in several prerequisite courses. The prerequisite courses for admission to nursing courses include: Anatomy and Physiology I and II, Introductory Chemistry, Chemistry Lab, Physiological Chemistry (organic and biochemistry), General Psychology, Life Span Psychology, (over all ages in the life span), and Principles of Sociology. (See course descriptions under appropriate disciplines). The Chairperson of the Department of Nursing makes the decision relative to admission based upon the committee's recommendation and available positions. Grades attained in prerequisite science courses carry greater weight than overall QPA.

- b. Candidates who are registered nurses (RN's) must apply directly to the Office of Admissions. Official transcripts from all previously attended postsecondary educational institutions including those colleges affiliated with the hospital schools must be included with the application. To gain admission to the nursing program, the candidate must be a graduate from a state-approved associate degree or diploma nursing program. The Office of Admissions reviews the application and evaluates any credits from the official transcripts submitted. If the candidate meets the guidelines for the admission for a registered nurse, the application is forwarded to the Department of Nursing\*. The minimum requirements and process from this point is the same as for other external transfer students. (See above.)  
\* The Student Admission, Progression, and Retention (SAPR) Committee generally reviews transfer applications twice a year. Applications must be submitted to the Office of Admissions before November and before February.

#### 3. Internal transfer candidates —

Candidates already admitted in other majors at Bloomsburg University apply directly to the Chairperson, Department of Nursing. Candidates must meet the guidelines for freshman candidate admission to the nursing program as well as provide evidence of a QPA of 2.5. If a candidate believes he/she meets the guidelines, he/she may meet with the Chairperson, Department of Nursing, for an

informal review of his/her transcript and discuss the program. If the candidate still desires transfer, he/she sends a letter to the Chairperson, Department of Nursing, requesting admission into the nursing program. Upon receipt of the letter, the candidate is sent a "Student's Academic File Transfer Request" form which allows the candidate to obtain his/her academic file from the current department and deliver it to the Nursing Department. The record will then be reviewed by the Student Admission, Progression, and Retention (SAPR) Committee. From this point the process is the same as for external transfers (see above); however, notification of acceptance of internal transfer is sent from the Chairperson, Department of Nursing.

4. Second baccalaureate degree candidates (as described under Readmissions in this catalogue) are also considered for admission by the Chairperson, Department of Nursing. An appointment with the chairperson is encouraged prior to application. Application is made directly to the Office of Admissions, where it is reviewed and the guidelines for freshman admission to the nursing major is followed.

## Baccalaureate in Nursing Program

Graduation requires the successful completion of at least 128 semester hours to include general education requirements and completion of the curriculum of the major in nursing with a minimum QPA of 2.0.

### Curriculum Requirements

**1. General Education:** See section on General Education Requirements. A number of the prescribed courses in physical sciences and social sciences, required as prerequisites for the nursing curriculum, may also apply toward meeting General Education Requirements in groups B and C.

**2. Prerequisite:** Biology 50.173, 174, 240; Chemistry 52.101, 108, 113 or 103; Psychology 48.101, 110; Sociology 45.211, Statistics 48.160 or 53.141.

**3. Nursing:** 82.210\*, 211, 212, 213, 306, 311, 312, 410, 411, 412, 413.

**4. Free electives:** As necessary to complete the minimum graduation requirement of 128 semester hours.

\* Registered nurses take 82.215 Role Development for the Nurse Generalist instead of 82.210. These students may also earn certain credits through examinations if they meet the required provisions. Those examinations are described below.

- a. Credit by Examination (faculty prepared examinations) procedure as explained elsewhere in this catalog. In the Department of Nursing, the RN may

petition for credit by examination in courses 82.211; 82.212 and 82.410. Nursing study guides are available to facilitate review for these examinations. Petitioning for credit by examination can only occur following admission to the university. Other departments can be contacted to petition for credit by examination based upon university policy. The student must go directly to the chairperson of the individual department (i.e. Biological and Allied Health Sciences, Chemistry, etc.)

- b. College Level Equivalency Examination Program (CLEP), procedure as explained elsewhere in this catalog.
- c. NLN Mobility Profile II: Thirty-six (36) credit hours of advanced placement may be earned through the successful completion of three NLN Mobility Profile II tests. Each examination may be taken a second time in the event of failure on the first examination. A second failure on the same examination will require enrollment in the recommended Bloomsburg University course. Information about the NLN Mobility Profile II tests may be obtained from the Department of Nursing.
- d. ANA Certification Examinations: Presentation of evidence of successful completion of ANA certification in a clinical speciality may be submitted for transfer of credits in the course to which the certification applies in lieu of the NLN Mobility Profile II examination.

A suggested four-year sequence of the above requirements, planned for optimum systematic growth and development of students is as follows:

### FRESHMAN YEAR

		semester hours
50.173	Anatomy and Physiology I	4
52.101	Introductory Chemistry	3
52.113	Chemistry Laboratory (or)	2
52.103	Introductory Chemistry Laboratory	
48.101	General Psychology	3
20.101	Composition I (or)	3
20.104	Honors Composition	
05.000	Survival	1
		semester hours
Spring semester		
50.174	Anatomy and Physiology II	4
52.108	Physiological Chemistry	4
45.211	Principles of Sociology	3
48.110	Life-Span Psychology	3
20.201	Composition II (or)	3
20.200	Writing Proficiency Examination	
05.000	Survival	1

### SOPHOMORE YEAR

		semester hours
50.240	Introductory Microbiology	3

82.210	Nursing I (non-RN's)	3
82.215	Role Development for Nurse Generalist (RN's) experimental course	3
82.211	Nutrition	3
82.212	Pharmacology	3
--.---	Communication Elective	3
05.000	Survival	1
Spring Semester		
82.213	*Nursing II	6
--.---	**Statistics	3
--.---	Quantitative-analytical elective or General education requirement	3
--.---	General education requirement	6

#### JUNIOR YEAR

***Fall or spring semester	semester hours	
82.311	Nursing III	8
--.---	Values electives	3
82.306	Methods of Inquiry	3
***Fall or spring semester		
82.312	Nursing IV	8
--.---	General education requirement	9

#### SENIOR YEAR

***Fall or spring semester	semester hours	
82.410	Nursing V	6
82.411	Nursing VI	6
--.---	Free elective	3
***Fall or spring semester		
82.412	Nursing VII	8
82.413	Nursing Trends and Issues	3
--.---	Free elective	3

\*University vehicles are available for student transportation to clinical laboratory experiences in the sophomore year. In the junior and senior year, students must provide their own transportation to clinical laboratory experiences. Uniforms, a sweep-second-hand wrist watch, a stethoscope, and other equipment and supplies as may be required must be provided at student expense.

\*\*Statistics is a requirement within the core curriculum in nursing. The course in statistics may be selected from either the department of mathematics or psychology and may apply as a general education requirement.

\*\*\*In the junior and senior years, the class is divided in half, so that half the students take the level classes in a different sequence.

#### Academic Good Standing Policy

Students in the baccalaureate nursing program must abide by the university's academic good standing and retention policies as described elsewhere in this catalog and the academic good standing policy of the Department of Nursing. In order for a student to progress and be retained in the baccalaureate nursing program, the student must:

1. Attain a grade of "C" or above in:
  - a. Prerequisite natural science courses:  
Anatomy and Physiology I  
Anatomy and Physiology II  
Introductory Chemistry  
Chemistry Laboratory or  
Introduction to Chemistry Laboratory  
Physiological Chemistry  
Introductory Microbiology
  - b. Prerequisite social science courses:  
General Psychology  
Life Span Psychology  
Principles of Sociology
  - c. All required 82.--- departmental courses.

2. Obtain a cumulative QPA of 2.50 (after 32 earned credits) to enroll in the sophomore year nursing courses.

A student who does not meet the identified requirements for departmental academic good standing will be required to eliminate the identified deficiencies through a repetition of the course before progressing in the baccalaureate nursing program.

A student may repeat nursing courses only once. University policy as to repetition of non-nursing courses applies to the Department of Nursing.

The department reserves the right and the responsibility to develop procedural guidelines for the implementation of this academic good standing policy.

Recommendations concerning academic progression and retention are made to the Department of Nursing Chairperson by the departmental Student Admission, Progression, and Retention Committee. Based upon these recommendations, students who do not meet the requirements for academic good standing are placed on departmental probation or are required to take a departmental leave of absence.

#### 1. Departmental Academic Probation

- a. Students who do not meet the requirements listed under the policy for departmental academic good standing will be evaluated by the Committee on Student Admission, Progression, and Retention and will be immediately placed on departmental academic probation.
- b. Students will be notified by the chairperson of the Department of Nursing.
- c. Students will be required to eliminate the identified deficiencies through a repetition of the course before progressing in the nursing program.
- d. Nursing courses may be repeated only once.

University policy as to repetition of non-nursing courses applies to the Department of Nursing.

e. No student will be allowed to be on departmental academic probation for two consecutive academic periods or more than a total of three academic periods. If this occurs, the student will automatically be requested to take a leave of absence from the department.

## 2. Departmental Academic Leave of Absence

- a. A student who does not maintain departmental good standing requirements after one academic period on probation or a total of three academic probationary periods will automatically be required to take a leave of absence from the department.
- b. Students will be notified of such actions by the chairperson of the Department of Nursing.
- c. Students on a departmental academic leave of absence are ineligible to attend any courses offered by the department for a period of at least one calendar year. Students seeking reinstatement to active departmental status must do so in accord with the department's transfer policy.

## 3. Health Policy

Based upon the requirements of the Pennsylvania State Board of Nursing and the requirements of the contractual agreements with the clinical agencies which provide clinical practice sites, the Department of Nursing requires students to have a yearly physical examination as well as specific diagnostic tests and immunizations. In addition, a dental examination and an eye examination are required upon admission to the baccalaureate nursing program. The University Student Health Center is responsible for these records which serve as the verification of satisfactory health required for progression in the baccalaureate nursing program.

Because of the nature of nursing, the nursing faculty reserves the right to counsel, suspend, or dismiss those students who, in their judgment, do not satisfy the requirements of scholarship, health, and personal suitability for nursing.

## COURSE DESCRIPTIONS

### Nursing (Code 82)

Note: Courses within the nursing curriculum are restricted to students enrolled in the B.S.N. program except for 82.217 Alcohol: Use and Abuse which is a free elective for anyone.

### 82.200 NURSING PLACEMENT

#### Variable semester hours

This is a number used to transfer in advanced placement credits resulting from NLN Mobility II Profile tests which may be taken by registered nurses (RN's).

### 82.210 NURSING I

#### 3 semester hours

The focus of this course is on the roles of the professional nurse and the use of the nursing process. Content also includes the philosophy and conceptual framework of Bloomsburg University, Department of Nursing, health care delivery systems, and the legal and ethical aspects of nursing practice.

Prerequisites: 50.173, 174; 48.101, 110; 45.211; concurrent 50.240.

### 82.211 NUTRITION

#### 3 semester hours

This course provides an introduction to the principles of nutrition and ways in which these principles are applied to promote an optimal level of wellness for all individuals. Topics include nutritional requirements for maintaining health and development throughout the lifespan as well as factors affecting food choices of individuals and society.

Prerequisites: 50.173, 174; 52.101, 108, 113 or 103; concurrent 50.240

### 82.212 PHARMACOLOGY

#### 3 semester hours

This course provides a foundation in pharmacology for pharmacologic content integration throughout the curriculum. Historical, legal, ethical, social, and political dimensions of pharmacotherapeutics are explored.

Prerequisites: 50.173, 174; 52.101, 108, 113 or 103; concurrent 50.240

### 82.213 NURSING II

#### 6 semester hours

The course focus is on the use of the nursing process to facilitate an optimal level of wellness of adult individuals in a diverse and multicultural society in nonlife-threatening, adaptive situations in community hospitals. The content is organized within the framework of the basic human needs of self-concept, security, mobility, nutrition/elimination, and oxygenation and developed through application of the nursing process. Beginning role behaviors are applied in the clinical setting.

Prerequisites: 50.240; 82.210, 211, 212

### 82.215 ROLE DEVELOPMENT FOR THE NURSE GENERALIST (RN'S) (experimental course approved to be offered twice)

#### 3 semester hours

This course is designed to resocialize the registered nurse for professional practice. The course will introduce the philosophy, purpose, objectives, and conceptual framework of the Bloomsburg University Department of Nursing's program. Through increased knowledge and integra-

tion of varied professional nursing concepts, the student will develop the roles of clinician, teacher, leader, consultant, and consumer of research.

**Prerequisites:** Current state licensure as a Registered Nurse, 50.173, 174; 52.101, 108, 113 or 103; 48.101, 110; 45.211.

### **82.217 ALCOHOL: USE AND ABUSE**

**3 semester hours**

This course provides a comprehensive overview of alcohol use and misuse in the American population. Because alcohol is a leading public health problem in the U.S. today, this course is intended for students in all disciplines. The nature of alcohol problems will be examined as well as sociocultural attitudes towards drinking. Alcohol's effects on the body will be explored. The impact of alcoholism on adolescents, professional workers, women, the elderly, and the family will be discussed. Prevention, intervention, and referrals will be examined. An overview of treatment and rehabilitation will include spiritual, moral, and legal aspects.

**Prerequisites:** None.

### **82.306 METHODS OF INQUIRY**

**3 semester hours**

The course introduces students to (a) research methods and techniques in order to assist them to be consumers of research, (b) the contribution of research to the discipline and the consumer's role in applying research findings, and (c) using the research process in identifying a researchable problem and formulating a beginning level research prospectus.

**Prerequisites:** Basic statistics course (either 48.160 or 53.141), which can be concurrent.

### **82.307 GERIATRIC NURSING**

**3 semester hours**

**Elective.** Focuses on the physiological, psychological, and social aspects of aging with emphasis on the assessment of problems and appropriate nursing intervention.

**Prerequisite:** Junior or senior nursing status or Registered Nurse (RN).

### **82.311 NURSING III**

**8 semester hours**

This course focuses on the use of the nursing process in helping adult individuals and families reach their optimal level of wellness as they adapt to chronic and potentially life-threatening situations. The content is organized within the framework of five basic human needs. Professional role behaviors continue to develop in clinical settings in medical centers/hospitals as the student achieves a broader perspective of the client as an individual and a family.

**Prerequisite:** 82.213

### **82.312 NURSING IV**

**8 semester hours**

This course focuses on the use of the nursing process to facilitate optimal level of wellness of beginning and developing families in clinics and child care centers. Theories of

growth and development and family developmental tasks provide the framework for planning and implementing nursing care with a diverse, multicultural client population in medical centers/hospitals. The students continue to develop in their role performance as they interact with clients and other health care providers to improve the quality of family health care.

**Prerequisite:** 82.213

### **82.313 SPECIAL TOPICS**

**1-6 semester hours**

Presents a diversity of topics focusing on contemporary trends, issues, and problems relevant to the principles and practice of professional nursing in the health care system.

**Prerequisite:** Junior nursing standing

### **82.405 INDEPENDENT STUDY**

**1-6 semester hours**

Requires an investigation of an area of special interest and value to the student under the direction of a faculty member following a plan approved by the department chairperson. It may be interdisciplinary.

**Prerequisite:** Senior nursing standing

### **82.410 NURSING V**

**6 semester hours**

This course focuses on the use of the nursing process in assisting the community with its adaptive responses to facilitate an optimum level of wellness of holistic man. The process of role development will be fostered through independent and interdependent activities with a variety of culturally diverse population aggregates in community settings.

**Prerequisites:** 82.311, 312

### **82.411 NURSING VI**

**6 semester hours**

This course provides the student with a holistic focus on a diverse, multicultural client population at various points on the mental health/mental illness continuum. Relevant principles and theories of human behavior, adaptation, and therapeutic intervention provide a framework for the planning and implementation of nursing care. Students employ a "therapeutic use of self" as they implement the nursing process to assist individuals, families, and communities in attaining and maintaining an optimal level of mental wellness. The professional role development of the student is enhanced through a variety of independent and interdependent activities with clients and the interdisciplinary team which are designed to improve the quality of mental health care.

**Prerequisites:** 82.311, 312

### **82.412 NURSING VII**

**8 semester hours**

This course focuses on meeting the health care needs of a diversity of adult clients in complex and life-threatening adaptive situations. Students use developed skills in critical thinking in assisting these clients to attain and maintain an optimal level of wellness. They collaborate with clients and the interdisciplinary team in acute care and community settings in the implementation of preventive, restorative, and

rehabilitative activities designed to maintain optimal health of holistic man. Learning experiences are provided in medical centers/hospitals so that the student can continue to develop proficiency as a clinician, teacher, and consumer of research. Emphasis is directed toward learning activities which allow the student to function as a leader and consultant to improve the quality of health care.

Prerequisites: 82.311, 312

#### **82.413 NURSING TRENDS AND ISSUES**

**3 semester hours**

This course explores the nature of professional nursing as it occurs in our society with particular reference to the health care system and the future. A seminar format is utilized in exploring and analyzing current issues and trends in professional nursing.

Prerequisites: 82.311, 312

### **SERVICES, CLINICS, LEARNING CENTERS**

#### ***Curriculum Materials Center***

The basic objective of the Curriculum Materials Center, housed in the McCormick Human Services Center, is to locate, acquire, catalog, and make accessible curricular and instructional materials to preservice and inservice teachers. The resources housed in the center include elementary and secondary textbooks, a multicultural curriculum materials collection, curriculum guides, games, instructional materials kits, tests, and computer software. A cluster of Macintosh microcomputers and a laser printer also are available. Paul Quick is director of the center.

#### ***Reading Clinic***

The Reading Clinic, located in Navy Hall, offers free diagnostic evaluation to children and adults. After evaluation, remedial counseling and instruction are provided if desired including parent counseling. This is a year-round service.

#### ***Speech, Hearing, and Language Clinic***

This clinic, located in Navy Hall, provides a number of free services to students, faculty, staff, and the community. Services available include speech, voice, language, hearing and hearing aid evaluation, educational-psychological training, speech reading, educational therapy for the hearing impaired, and parent counseling. Richard M. Angelo is director of the clinic.

#### ***Educational Computing Laboratory***

The Educational Computing Laboratory is located in the McCormick Human Services Center and has computers available for student and faculty use including 20 GSs, and one Macintosh. Donald Pratt coordinates use of the laboratory.

# SPECIAL PROGRAMS

## Air Force ROTC

Bloomsburg University participates with Wilkes College in an on-campus program which allows students to qualify for commissions in the United States Air Force upon graduation.

The Air Force Reserve Officer Training Corps (AF-ROTC) provides a four-year program divided into the general military course (GMC) in the first two years and the professional officer course (POC) in the last two years. A student may elect to enroll in either the total four-year program or just the two-year POC program.

For acceptance into the POC, four-year program students must pass a physical examination, an officer qualification test, have attained an acceptable academic rating, and successfully complete a four-week field training course prior to their junior year.

To qualify for direct entrance in the two-year POC program, students must have two academic years remaining at either the graduate or undergraduate level or a combination of the two. They must meet the physical standards, pass an officer qualification test, have an acceptable academic rating, and successfully complete a six-week field training course. Transfer students may elect the two-year program if they satisfy the above requirements. Students interested in the two-year program should start the application process early in their sophomore year.

Members of either the four-year or two-year program are eligible to compete for AFROTC scholarships.

Uniforms, equipment, and textbooks for the AFROTC work are supplied by Wilkes College and the U.S. Air Force. Students in the POC receive a \$100 per month allowance.

Students who successfully complete the POC are commissioned as second lieutenants in the United States Air Force Reserve. They serve on active duty in the Air Force as pilots, navigators, missileers, or in a specialty as close as feasible to their academic training and consistent with Air Force needs.

Four semester hours of credit may be earned in the GMC, 12 semester hours in the POC, and up to six in the field training program.

The field training required before entry into the POC is held at several operational bases each summer. Cadets have an opportunity to observe, fly, and live with career personnel. Transportation to and from the legal residence of the cadet to the field training base, food, lodging, medical, and dental care are provided by the Air Force. The cadet receives approximately \$400 for the four-week field training program or \$600 for the six-week program.

The Department of Aerospace studies at Wilkes College conducts a number of field trips to Air Force installations. The trips include tours of air force bases and familiarization flights.

## AEROSPACE STUDIES

(Code 61)

### General Military Courses

The general military courses (GMC) constitute a two-year program for freshmen and sophomores and are designed to provide general knowledge of the role, organization, mission, and historical development of U.S. Air Power. Students enrolled in the GMC, who are not on Air Force scholarships, incur no military obligations.

#### Coadjutant Instructors in Aerospace Studies:

Lt. Col. Dave G. Billings, Maj. William D. Newton, Capt. Leo L. Lynn, Capt. Karl H. Zimmerman

##### **61.110 U.S. MILITARY FORCES IN THE CONTEMPORARY WORLD I**

**1 semester hour**

Presents background, missions, and functions of U.S. military forces with emphasis on U.S. Air Force organization, doctrine, and strategic forces. Two hours per week: 1 class, 1 laboratory

##### **61.120 U.S. MILITARY FORCES IN THE CONTEMPORARY WORLD II**

**1 semester hour**

Reviews U.S. general purpose military forces, insurgency and counter-insurgency, aerospace support forces, and organizations. Two hours per week: 1 class, 1 laboratory.

##### **61.151 LEADERSHIP LABORATORY**

**0 semester hours**

Involves a progression of experience designed to develop each student's leadership potential in a supervised training laboratory. Examines Air Force customs and courtesies, drill and ceremonies, career opportunities, and life and work of an Air Force junior officer. *ALL AFROTC STUDENTS, EXCEPT THOSE ENROLLED ONLY IN 61.230, 330, AND 340, MUST ELECT THIS COURSE.*

##### **61.210 THE DEVELOPMENT OF AIR POWER I**

**I semester hour**

Reviews air power development in historical perspective through the end of World War II including mission, concine, and employment evolution with emphasis on changes in conflict and technology.

##### **61.220 THE DEVELOPMENT OF AIR POWER II**

**I semester hour**

Addresses air power development from the end of World War II to the present; changing missions and employment of air power in support of national objectives. Two hours per week: 1 class, 1 laboratory

##### **61.230 BASIC ROTC CAMP**

**I-4 semester hours**

Includes leadership training, survival training, and fitness training. Offered after successful completion of freshman and sophomore courses and by permission of instructor.

## **PROFESSIONAL OFFICER COURSES**

The Professional Officer Courses (POC) constitute a four-semester program, normally taken during the junior and senior years, mandatorily leading to commissioning as an Air Force officer. The POC concentrates on national defense policy, concepts, and practices of management and concepts and practices of leadership.

### **61.310 CONCEPTS OF MANAGEMENT**

**3 semester hours**

Outlines fundamentals of organization and administration. The evolution of management including classical, behavioral and management science schools, study of information systems, quantitative approach to decision making, policy formulation, principles and practices in planning, organizing, staffing, actuating, directing, and controlling business and Air Force activities, resource control techniques, social and ethical issues within the management process, and development of communicative skills. Four hours per week: one 3-hour class, 1 laboratory

### **61.320 CONCEPTS OF LEADERSHIP**

**3 semester hours**

Studies Air Force leadership at the junior officer level including its theoretical, professional, and legal aspects. Provides practical experience in influencing people, individually and in groups, to accomplish organizational missions effectively. Develops communicative skills. Four hours per week: one 3-hour class, 1 laboratory

Prerequisite: 61.310 or permission of instructor

### **61.330 ADVANCED ROTC CAMP**

**1-6 semester hours**

Includes leadership training, survival training, and fitness training. Offered in lieu of the freshman and sophomore courses for transfer students and other students who enter the program at the junior level.

### **61.340 FLIGHT PROGRAM GROUND TRAINING**

**1 semester hour**

Prepares AFROTC cadets and others for FAA private pilot examination through study of general regulations, air traffic rules, accident reporting, air navigation, weather, safety, principles of flight, basic operations, flight computer. Limited spaces beyond AFROTC requirements are available to all Bloomsburg juniors and seniors without incurring military obligations. Two hours of class/laboratory per week for eight weeks during the spring semester.

### **61.410 NATIONAL SECURITY FORCES IN AMERICAN SOCIETY I**

**3 semester hours**

The role and functions of the professional military officer in a democratic society and civil-military interaction; basic framework of defense policy and formulation of defense strategy; development of communicative skills. Four hours per week: one 3-hour class, 1 laboratory

### **61.421 NATIONAL SECURITY IN AMERICAN SOCIETY II**

**3 semester hours**

Studies the problems of developing defense strategy in a rapidly changing technological environment effective deterrent posture and management of conflict; dynamics and agencies of defense policy making analyzed through case studies.

Prerequisite: 61.410 or permission of instructor

## **Army ROTC**

Army ROTC at Bloomsburg became an extension center of Bucknell University on Oct. 1, 1986, and now has full-time instructors assigned on campus. This program also allows cadets to belong to local Army Reserve and National Guard units and receive their commission as a Second Lieutenant as early as the end of the junior year. Two- and three-year scholarships are available, and opportunities exist for flight training, Airborne and Air Assault School, and Ranger training.

Bloomsburg University students can qualify for a commission in the U.S. Army, Army National Guard, or Army Reserve through the on-campus Army ROTC program. The first two years of the program may be taken without military obligation.

Army ROTC provides a four-year curriculum open to both men and women regardless of academic major or area of study. It is divided into a basic program of four courses given during the freshman and sophomore years and the advanced program of four courses given during the junior and senior years. Academic credit is given for all these courses. The basic program does not require the student to make any commitment with the U.S. Army and allows the student to develop an understanding of the role of the commissioned officer within the Army. Course work provides training in leadership and management skills which help the individual develop the ability to communicate effectively, think analytically, and make independent and responsible decisions.

Bloomsburg students are able to compete for Army ROTC scholarships which pay full tuition and other educational fees. All students enrolled in the advanced program receive \$100 a month for the 10-month period during the school year. After completing the first year of the advanced program (normally between the junior and senior years), the student will attend an advanced camp at Fort Bragg, N.C. Payment during this camp is at a rate equivalent to one-half the basic pay for a second lieutenant together with allowances for travel, subsistence, housing, uniforms, and medical care.

Veterans can be considered immediately for the advanced program by receiving constructive credit for the first two years of the Army ROTC. Other students who did not take ROTC during their freshman and sophomore years can still qualify for the advanced program if they have two years remaining at Bloomsburg. There are a variety of programs available to qualify these students for the advanced program.

Army ROTC also offers a ranger detachment for students who wish to gain more experience in outdoor activities, e.g., orienteering and survival skills.

The Army National Guard and Army Reserve conduct a program in coordination with Army ROTC at Bloomsburg. This simultaneous membership program allows a student to earn more than \$12,000 while participating in the program and gaining a commission as a second lieutenant in the Army National Guard or Reserve.

Successful completion of the ROTC Advanced Program leads to a commission as a second lieutenant in the U.S. Army, Army Reserve, or Army National Guard. Active duty time will vary according to the type of program the student has elected, and students can be guaranteed Reserve/National Guard duty if they desire.

## MILITARY SCIENCE

### Co-adjutant Instructors in Military Science

Major George J. Venesky, director of military science and SFC James G. Kelley

#### Army ROTC Basic Program (Freshman and Sophomore years) (Code 67)

#### 67.110 INTRODUCTION TO MILITARY SCIENCE 1 semester hour

Presents an overview of the Army ROTC four-year program and the scholarship opportunities available to ROTC cadets. Provides an overview of military skills including land navigation, map reading, rappelling, and practical field training.\* One 75-minute class per week, 7 evening laboratories per semester.

#### 67.120 INTRODUCTION TO MILITARY ISSUES 1 semester hour

Presents a discussion of the role of the U.S. Army, the Army Reserve, the Army National Guard, as well as an in-depth look at the organization and missions of Army units from squad through division. Practical experience will include use of military radios, small unit tactics, rappelling, and practical field training.\* One 75-minute class per week, 7 evening laboratories per semester.

#### 67.210 APPLIED LEADERSHIP AND MANAGEMENT I

1 semester hour

Provides an overview of the Army rank structure and a specific survey of the junior officer's duties and responsibilities within that rank structure. Practical training will consist primarily of advanced land navigation skills building on those skills mastered in 67.110 with further field navigation experience as well as rappelling and practical field training.\* One 75-minute class per week, 7 evening laboratories per semester.

#### 67.220 APPLIED LEADERSHIP AND MANAGEMENT II

1 semester hour

Presents the fundamentals of small unit leadership and mission planning techniques to include the reverse planning process and problem-solving techniques. Course also provides an overview of the branches of the U.S. Army, service pay, and benefits. Practical experience will apply the principles learned to a field environment.\* Four hours per week: one 3-hour class, 1 laboratory

#### 67.230 ROTC BASIC CAMP

4 semester hours

**Sophomore Summer Semester** –Course is offered in lieu of the basic course for transfer students and other students who wish to enter the advanced program. The camp is held each summer at Fort Knox, Kentucky, and is six weeks in duration. Subjects presented coincide with those described above and include such survival skills as map reading (with extensive practical application), first aid including the four lifesaving steps, plant identification, and personal hygiene in a field environment. Stresses skills applicable to lifelong recreational pursuits and fitness. Four hours per week: one 3-hour class, 1 laboratory

**\*Note:** Conducted during leadership laboratory and consists of adventure/survival training, land navigation, first aid, and dismounted drill exercise, which cannot be conducted in the classroom.

#### Advanced Program (Junior and senior years)

#### 67.310 ADVANCED MILITARY SCIENCE I

3 semester hours

Provides a detailed study of the leadership techniques and principles introduced in 67.220. Course will rely on case studies drawn from experience of active duty lieutenants and will place cadets in role model situations to provide first-hand experience in problems of small unit leadership.\*\* 1 2-hour class per week, 7 laboratories

#### 67.320 THEORY AND DYNAMICS OF THE MILITARY TEAM

3 semester hours

Applies the techniques learned in 67.310 to a detailed study of the principles of war, the Geneva and Hague Conventions, and small unit tactics. Course will include an analysis of the Soviet and Warsaw Pact Forces and current U.S. Doctrine to counter the threat posed by those forces.\*\* one 2-hour class per week, 7 laboratories per semester.

#### 67.330 ROTC ADVANCED CAMP

6 semester hours

A six-week practical application and evaluation phase required of each cadet prior to commissioning. Advanced camp, conducted at Fort Bragg, N. C., places cadets in leadership positions where they must put into practice the techniques

learned on campus in both tactical and nontactical situations. Advanced camp also affords cadets the opportunity to develop skills in the area of survival, fitness, and life-long recreational skills in both formal and informal settings of the 337 hours of formal training at advanced camp, 152 or 45%, have application to these three-key areas.

**67.410 ADVANCED LEADERSHIP AND MANAGEMENT I**

**3 semester hours**

Presents advanced leadership and management skills required of a manager in a military environment. Students will perform roles in management of a military organization utilizing course-presented skills in administration, training, conduct of meetings, briefings, and logistics.\*\* Four hours per week: 1 2-hour class per week, 7 laboratories per semester.

**67.420 ADVANCED LEADERSHIP AND MANAGEMENT II**

**3 semester hours**

Acquaints the students through a series of case studies and role playing simulations with the high ethical standards required of a manager and leader. Additionally, students will learn the basic principles and procedures of military law and their application in a military environment. Students will continue to perform roles in management of a military organization utilizing skills developed in prior military science courses.\*\* 1 2-hour class per week, 7 laboratories per semester.

**\*\*Note:** Cadets will gain further practical leadership training during leadership laboratory while performing in leadership positions and conducting training.

**Marine Platoon Leaders Program**

This is a program which provides selected students an opportunity to be commissioned as officers in the Marine Corps after having completed summer training courses and the baccalaureate degree from Bloomsburg University of Pennsylvania.

Programs for aviation and law also are available.

Contact person: B.N. Shultis, Captain, Veteran's Administration Building, North Main Street, Wilkes-Barre, PA 17801 (717) 823-4131.

# **SCHOOL OF EXTENDED PROGRAMS**

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*Magee Center  
700 West Street  
Bloomsburg, Pa.*



# SCHOOL OF EXTENDED PROGRAMS

The School of Extended Programs, located in the Magee Center on 700 West Main Street, administers and coordinates university-wide efforts to provide lifelong education for citizens of the Central Susquehanna Valley region.

The school also coordinates the operation of international education, summer sessions, television courses, experiential learning, internships, cooperative education as well as public service mini-courses, conferences, and workshops.

## Nondegree Credit Program

Based on the assumption that learning should be a lifelong process, the nondegree credit program provides for enrollment by an individual in regular undergraduate credit courses without formal admission to the university as a degree candidate. Individuals are invited to use this program as an opportunity to review skills, acquire new knowledge, or pursue cultural and intellectual interests. Credit courses may be chosen from both day and evening offerings, either on campus or at off-campus locations.

Credit earned in appropriate courses taken as a nondegree student may be applied later to a regular degree program if the individual seeks and is granted formal admission to a degree program in the university. Courses taken by nondegree students also can be used for a variety of designated certificate programs and to meet undergraduate deficiencies for graduate study. (The School of Graduate Studies has its own nondegree regulations. See the Graduate Studies booklet.)

## Noncredit Mini-Courses

Noncredit mini-courses provide opportunities for individuals to gain specialized knowledge and/or skills for career purposes or to pursue cultural, recreational, and special interests through short-term experiences without credit.

These courses reflect expressed community needs. A nominal course fee is charged. Individuals who wish to enroll in the minicourseprogram are not required to file credentials; in most cases the only formality is that of registration for the course(s) desired with the School of Extended Programs.

## Attendance Fee Program

The attendance fee program allows individuals to attend classes without credit. Admission on this basis depends upon available space and the payment of a \$25 fee per course. Courses attended through this process do not generate college credit for the attendee. In most cases the only formality is that of registration for the course(s) desired with the School of Extended Programs.

## Admission Procedures for Nondegree Students

### Credit Students

Admission to the nondegree credit program is open to all high school graduates or those holding GED credentials; no standardized test scores are required.

Application forms may be obtained from the dean of Extended Programs or the Office of Admissions and are filed with the Office of Admissions. Supporting credentials are required as follows:

- Adults who desire to enroll as part-time students must complete a nondegree application form which requires affirmation of high school graduation or certification of high school equivalency.
- A student enrolled in another institution of higher education who wishes to take courses for transfer to the home institution must complete a non degree application form which requires affirmation of attendance at another institution of higher education. It is recommended that the applicant make certain that coursework pursued at Bloomsburg University will be accepted by the home institution.
- A high school student who desires to combine college work with high school study must file a high school transcript, junior year SAT scores, if applicable, a letter of recommendation from the high school counselor, and letters of recommendation from two high school instructors in the academic area of intended study. Acceptance for admission requires concurrence by the high school principal.
- Graduate students with undergraduate deficiencies must be recommended to the School of Extended Programs by an appropriate graduate adviser to pursue such undergraduate courses as recommended.
- An individual who wishes to pursue a remedial program to qualify for undergraduate degree admission must submit a high school transcript and official documentation of all previous college attendance, if any.
- Students with an earned baccalaureate degree who wish to complete the requirements for Level I or Level II teacher certification must submit a transcript from the institution granting the baccalaureate degree and be recommended to the School of Extended Programs by the dean of the College of Professional Studies.
- Senior citizens who are retired, over 60 years of age, legal citizens of the United States, and residing in the Commonwealth of Pennsylvania are eligible to apply for a waiver of basic and/or tuition fees through the School of Extended Programs. Students in this category may be admitted to classes on a seat-available basis only.

## **Academic Advisement**

Advisement of nondegree students may be arranged by the dean of the School of Extended Programs. Students who are pursuing coursework for teacher certification are assigned to academic advisers in the College of Professional Studies and must secure an adviser's signature on a nondegree course selection form.

## **Summer Sessions**

Undergraduate and graduate courses are offered in the summer sessions on campus and at off-campus locations. Students may schedule as many semester hours in a session as the number of weeks in that session. An overload requires the approval of the appropriate college dean in keeping with university policy on normal load and overload.

Undergraduate courses are open without formal application to regularly enrolled students of the university who wish to enrich or accelerate their programs of study or make up academic deficiencies. Others must apply for nondegree admission through Extended Programs or the Admissions Office.

Students from other colleges are admitted to summer sessions upon the filing of a simplified application form.

Graduate courses are offered for students who wish to continue their education at the master's degree level and/or to qualify for permanent certification. (See *Graduate Catalog*.)

Special workshops are scheduled to provide teachers in service and other professional groups with specific training programs at times and locations convenient to their schedules and places of employment.

The *Summer Sessions Bulletin* which includes undergraduate and graduate courses may be obtained from the School of Extended Programs.

## **International Education**

The International Education Program advises international students and coordinates university-wide efforts to provide study abroad experiences for students and faculty. Through established relationships with foreign universities and membership in international education consortia, opportunities are provided to study for a semester, an academic year, or a summer at a foreign institution. In recent years, Bloomsburg students have spent part of their undergraduate years in Scotland, England, Ireland, France, Germany, Italy, Austria, Mexico, Ecuador, Brazil, and Japan.

Students in teacher education programs have the opportunity to complete their student teaching experience in a foreign country if they wish to add an international dimension to their professional development. Agreements with Liverpool Polytechnic and Edge Hill Colleges in England permit elementary and secondary education students to experience teaching in foreign classrooms. For information about any of the above programs, contact the Office of International Education, c/o the School of Extended Programs.

## **Cooperative Education**

The Cooperative Education Program at Bloomsburg University combines classroom theory and on-the-job experi-

ence, planned and supervised to enhance knowledge associated with a student's professional objectives. Students receive competitive salary for these positions and may receive credits toward graduation, where applicable.

The program is administered by the Cooperative Education Office in conjunction with participating academic departments. Cooperative Education opportunities, optional for most students, are available in business, industry, and the public sector.

Working under the direct supervision of experienced professionals, co-op students continue to develop their career skills and gain a competitive edge in the job market after graduation. Students with co-op experience often receive permanent employment offers from their co-op employers.

Inquiries regarding specific co-op opportunities, credit, and approval procedures should be directed to the director of cooperative education, Room 13, Benjamin Franklin Hall, (717) 389-4678.

## **Internships**

Participation in the university's internship program can add an important dimension to a student's educational experience and future career plans. The internship program offers an opportunity for students to combine academic instruction with an on- or off-campus experience. Affiliated with the School of Extended Programs, the program is managed by the director of cooperative education and administered by the participating academic departments.

The program includes internship experiences associated with various departments within the Colleges of Arts and Sciences, Business, and Professional Studies. Financial aid is available for some internships depending upon student need.

Questions regarding student internship opportunities, credit hours, financial aid, and approval procedures should be directed to the cooperative education office, Room 13, Ben Franklin Hall, (717) 389-4678. Detailed information about specific internships is available from the department chairperson or the intern network contact person within the student's program of study.

## **Experiential Learning**

In an effort to provide for those who have in the course of their life experience obtained knowledge and skills applicable to a college experience, Bloomsburg University provides the opportunity for experiential learning assessment. Through this process, life experiences are evaluated to determine their appropriateness and applicability for university credit. For details regarding this process, see the dean of Extended Programs.

## **Conferences and Workshops**

The university serves the educational requirements of professional, educational, governmental, business, and other community groups by offering facilities for conferences and workshops including satellite teleconferences. In the summer, the university can accommodate conference groups overnight.

Responsibility for scheduling and hosting conference groups rests with the School of Extended Programs. Organizations should contact the school's office at (717) 389-4420.

# **SCHOOL OF GRADUATE STUDIES**

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*Charles Carlson,  
Assistant Vice President for  
Academic Affairs and Acting  
Dean of Graduate Studies*



# GRADUATE STUDIES

## Degrees

Graduate study was inaugurated in 1960 with degree programs leading to the Master of Education planned for teachers in service. In 1968, approval was granted to offer a program in history to lead to the Master of Arts and in 1971 a program in biology to lead to the Master of Science. Degree programs were added subsequently leading to the Master of Business Administration in 1976, a Master of Science in Nursing in 1983, and a Master of Science in Instructional Technology.

The objective of the program for the Master of Education is to improve subject matter proficiency and develop mature, professional teachers. The objective of the Master of Arts program is to advance the student's scholarship in an academic discipline. Programs leading to the Master of Science are designed to develop mature scholarship and competence, especially as they are related to the application of acquired knowledge. The object of the Master of Business Administration is to provide increased knowledge and skills essential for quality performance in the business professions.

The university pledges itself to a continuous review of the needs for graduate education in the geographic region it serves. For a more complete explanation of the graduate programs, refer to the *Graduate Studies Catalog*.

## Schedules of Classes

Graduate classes taught in the regular academic year are usually scheduled in late afternoons, evenings, and on Saturdays in order to provide opportunity for teachers and individuals engaged in other full-time occupations to further their education. Graduate courses are offered for full-time students in the summer terms.

## Graduate Studies Catalog

A graduate catalog with comprehensive descriptions of courses, degree programs, university policies and regulations, is available upon request. To obtain a copy, please write to the Dean of the Graduate School, Waller Administration Building, Bloomsburg University, Bloomsburg, PA 17815.





*Harry Ausprich*

## **ADMINISTRATION**

### **HARRY AUSPRICH**

*President*

B.S., New York State University, College at Buffalo;  
M.S., University of Wisconsin; Ph.D., Michigan State  
University



*Betty D. Allamong*

### **BETTY D. ALLAMONG**

*Provost and Vice President for Academic Affairs*  
B.S., M.A., Ph.D., West Virginia University



*Jerrold A. Griffis*

### **ROBERT J. PARRISH**

*Vice President for Administration and Treasurer*  
B.S.C., Ohio University; M.P.A., Ed.S., D.Ed.,  
Florida Atlantic University; C.P.A., West Virginia  
University



*Robert J. Parrish*

### **JOHN. L. WALKER**

*Vice President for Institutional Advancement*  
B.B.A., M.S., Westminster College



*John L. Walker*

# FACULTY

## WILLIAM A. ACIERNO

Associate Professor *Mass Communications*  
B.A., University of Pittsburgh; M.F.A., Carnegie-Mellon  
University

## HAROLD C. ACKERMAN

Assistant Professor *Developmental Instruction*  
B.S. Ed., Bloomsburg State College; M.A., University of  
Kansas

## H. M. AFSHAR

Professor *Curriculum and Foundations*  
B.A., University of Tehran; M.Ed., Ed.D., University of  
Florida

## RICHARD D. ALDERFER

Professor *Communication Studies*  
B.A., Bluffton College; M.Ed., Temple University; Ph.D.,  
Ohio University

## THOMAS F. ALETO

Assistant Professor *Anthropology*  
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Illinois, Urbana-Champaign

## MIRZA W. ALI

Assistant Professor *Mathematics and Computer Science*  
B.A., M.A., University of Rajshahi, Bangladesh; M.Sc.,  
University of British Columbia; Ph.D., State University of  
New York

## MARY CHRISTINE ALICHNIE

Associate Professor *Assistant Chairperson,  
Nursing*  
B.S., University of Pittsburgh; M.S., Wilkes College; M.S.,  
Ph.D., University of Pennsylvania

## LELIA M. T. ALLEN

Associate Professor *Psychological Counselor,  
Counseling Center*  
B.S., Fayetteville State University; M.Ed., University of  
North Carolina; D.Ed. Florida State Christian University

## M. RUHUL AMIN

Associate Professor *Marketing and Management*  
HSC, Dhaka Government College, Bangladesh; B.A. (H),  
M.A., The University of Dhaka; M.A., D.P.A., Carleton  
University; M.A., Ph.D., The University of Akron

## GLADYS ANCRUM

Professor *Nursing*  
R.N., King's County Hospital School of Nursing; B.S.,  
M.A., Columbia University; M.P.H., D.P.H., University of  
California

## M. DALE ANDERSON

Associate Professor *English*  
B.S.L., Nebraska Christian College; M.A., Fort Hays  
Kansas State College

## RICHARD G. ANDERSON

Associate Professor *History*  
B.A., Western Kentucky State College; M.A., Ph.D., Texas  
Christian University

## WAYNE P. ANDERSON

Professor *Chairperson,  
Chemistry*

A.A.S., Jamestown Community College; B.A., Harpur  
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## DIANNE H. ANGELO

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B.S., M.Ed., Clarion University; M.S., University of  
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## RICHARD M. ANGELO

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College; Ed.D., Lehigh University

## KAREN ANSELM

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## CHRISTOPHER F. ARMSTRONG

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University of Pennsylvania

## EILEEN C. ASTOR-STETSON

Associate Professor *Psychology*  
A.B., Rutgers University; Ph.D., Vanderbilt University

## GEORGE B. N. AYITTEY

Associate Professor *Economics*  
B.S., University of Ghana; M.A., University of Western  
Ontario; Ph.D., University of Manitoba

## RAYMOND E. BABINEAU

Professor *Curriculum and Foundations  
Director, School of Education*  
B.A., M.A., Montclair State College; Ed.D., Temple  
University

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SHEILA MARTUCCI Instructor (part-time) B.A., William Paterson College	<i>Health, Physical Education, and Athletics</i>	RICHARD L. MICHERI Assistant Professor B.A., Fordham University; M.A., Columbia University	<i>Political Science</i>
THOMAS MARTUCCI Instructor B.S., Trenton State College	<i>Health, Physical Education, and Athletics</i>	DONALD C. MILLER Professor B.S., Ph.D., The Ohio State University; M.Ed., Bowling Green State University	<i>Curriculum and Foundations</i>
RICHARD E. MCCLELLAN Assistant Professor B.S., M.Ed., Bloomsburg State College; M.S., Bucknell University, C.P.A.	<i>Accounting</i>	G. DONALD MILLER JR. Professor B.S., Indiana University of Pennsylvania; M.A., Ph.D., Temple University	<i>Communication Disorders and Special Education</i>
SIDNEY M. MCCULLY Assistant Professor B.A., Hendrix College; M.A., Western Illinois University; Ph.D., University of Iowa	<i>English</i>	GORMAN L. MILLER Professor B.A., LaVerne College; M.S., Indiana University; Ed.D., Ball State University	<i>Curriculum and Foundations</i>
JOHN M. MCLAUGHLIN Professor B.S., Lock Haven State College; M.Ed., D.Ed., The Pennsylvania State University	<i>Communication Disorders and Special Education</i>	LYNNE C. MILLER Associate Professor B.S., College of Pharmacy, University of Rhode Island; M.S., University of Texas; Ph.D., New Mexico State University	<i>Biological and Allied Health Sciences</i>
JERRY K. MEDLOCK Professor A.B., Samford University; M.A., Ed.D., University of Alabama	<i>Chairperson, Health, Physical Education, and Athletics</i>	SCOTT E. MILLER JR. Associate Professor A.B., M.A., M.L.S., University of Pittsburgh	<i>Library Readers' Services Librarian</i>
ROBERT G. MEEKER Assistant Professor A.B., Lafayette College; M.A., University of Scranton	<i>English</i>	WENDY L. MILLER Assistant Professor B.S., Bluffton College; M.M., D.Mus., Indiana University	<i>Music</i>
JACK L. MEISS Associate Professor B.S., The Pennsylvania State University; M.Ed., Ed.D., Temple University	<i>Business Education and Office Administration</i>	DAVID J. MINDERHOUT Professor A.A., Grand Rapids Junior College; B.A., M.A., Michigan State University; Ph.D., Georgetown University	<i>Anthropology</i>
MARK S. MELNYCHUK Associate Professor B.S., Moravian College; Ph.D., Kent State University	<i>Assistant Chairperson, Biological and Allied Health Sciences</i>	LOUIS V. MINGRONE Professor B.S., Slippery Rock State College; M.S., Ohio University; Ph.D., Washington State University	<i>Chairperson, Biological and Allied Health Sciences</i>

RAJESH K. MOHINDRU Associate Professor B.A., M.A., DAV College; M.A., Ph.D., University of Pennsylvania	<i>Economics</i>	THOMAS L. OHL Assistant Professor B.S., Bloomsburg State College; M.Ed., Millersville State College	<i>Mathematics and Computer Science</i>
P. JAMES MOSER Professor B.S., M.S., Ph.D., The Pennsylvania State University	<i>Physics</i>	SHARON L. O'KEEFE Assistant Professor	<i>Health, Physical Education, and Athletics</i>
EDWIN P. MOSES Instructor B.A., Kansas State University; Ph.D., State University of New York at Binghamton	<i>English</i>	B.S., Trenton State College; M.Ed., East Stroudsburg University	
JAMES F. MULLEN Instructor B.S., The Pennsylvania State University; M.Ed., Bloomsburg State College	<i>Developmental Instruction</i>	JOHN J. OLIVO Associate Professor	<i>Chairperson, Business Education and Office Administration</i>
MAUREEN L. MULLIGAN Instructor B.A., Wheeling College; M.S., Indiana State University	<i>Counselor, Upward Bound</i>	B.S., Davis and Elkins College; M.Ed., Trenton State University; Ph.D., Michigan State University	
ALLEN F. MURPHY Professor A.B., Kenyon College; M.A., Ph.D., The Ohio State University	<i>Languages and Cultures</i>	JANET R. OLSEN Assistant Professor	<i>Library Assistant Acquisition Librarian</i>
STEWART L. NAGEL Professor B.F.A., Cooper Union; M.F.A., Pratt Institute	<i>Art</i>	B.S., Kutztown State College; M.S.L.S., Syracuse University	
AMPALAVANAR NANTHAKUMAR Assistant Professor BSC, University of Jaffna; M.S., Bowling Green State University; Ph.D., University of Kentucky	<i>Mathematics and Computer Science</i>	NANCY A. ONUSCHAK Professor	<i>Nursing</i>
CRAIG A. NEWTON Professor B.A., University of Pennsylvania; M.A., Southern Illinois University; Ph.D., Western Reserve University	<i>History</i>	B.S., M.S.Ed., Wilkes College; M.N., The Pennsylvania State University; D.Ed., Temple University	
ANN MARIE NOAKES Professor B.S., M.Ed., The Pennsylvania State University; Ph.D., University of Delaware	<i>Curriculum and Foundations</i>	CLINTON J. OXENRIDER Associate Professor	<i>Mathematics and Computer Science</i>
RONALD W. NOVAK Associate Professor B.S., California State College; M.Ed., University of Pittsburgh; M.A., University of Illinois	<i>Mathematics and Computer Science</i>	B.S., Bloomsburg State College; M.A., The Pennsylvania State University; D.A., Idaho State University	
WILLIAM S. O'BRUBA Professor B.S., California State College; M.Ed., Duquesne University; Ed.D., Indiana University of Pennsylvania	<i>Chairperson, Curriculum and Foundations</i>	TERRY A. OXLEY Assistant Professor	<i>Music</i>
		B.M.E., University of Wisconsin, Eau Claire; M.M.E., University of Wisconsin, Steven's Point; D.A., University of Northern Colorado	
		JAMES E. PARSONS Associate Professor	<i>Biological and Allied Health Sciences</i>
		B.S., M.S., Ph.D., The Ohio State University	
		JAMES W. PERCEY Associate Professor	<i>Political Science</i>
		A.B., University of Pennsylvania; M.A., Rutgers University	
		ALEXIS BULK PERRI Assistant Professor	<i>Nursing</i>
		B.S.N., M.S.N., University of Pennsylvania	
		MARION B. PETRILLO Assistant Professor (part-time)	<i>English</i>
		B.A., Wilkes College; M.A., Duquesne University	
		LAURETTA PIERCE Professor	<i>Chairperson, Nursing</i>
		R.N., Harrisburg Polyclinic Hospital School of Nursing; B.S.Ed., Temple University; M.S.N., University of Pennsylvania; Ph.D., Thomas Jefferson Medical College.	

JOSEPH R. PIFER Associate Professor B.S., Clarion State College; M.A., Arizona State University	<i>Geography and Earth Science</i>	PAUL QUICK SR. Assistant Professor <i>Director, Curriculum Materials Center</i> B.S., Bloomsburg State College; M.S., State University of New York at Potsdam
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JAMES C. POMFRET Professor B.S., Bates College; M.S., New Mexico State University; Ph.D., University of Oklahoma	<i>Chairperson, Mathematics and Computer Science</i>	ROBERT R. REEDER Associate Professor <i>Anthropology</i> B.A., M.S., The Pennsylvania State University; M.A., University of Colorado
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GLORIA J. SCHECHTERLY Instructor Diploma, Geisinger Medical Center School of Nursing; B.S.N., Wilkes College; M.S., The Pennsylvania State University	<i>Nursing</i>	CHRISTINE M. SPERLING Assistant Professor B.A., M.A., University of Oregon; Ph.D., Brown University	<i>Art</i>
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178/FACULTY			

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<b>JOAN B. STONE</b> Assistant Professor <i>Nursing</i> R.N., Harrisburg Hospital School of Nursing; B.S.N., University of Pennsylvania; M.S.N., The Pennsylvania State University; D.Ed., The Pennsylvania State University	<b>JORGE A. TOPETE</b> Assistant Professor <i>Languages and Cultures</i> A.M., Ph.D., University of Pennsylvania
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<b>HARRY C. STRINE, III</b> Associate Professor <i>Communication Studies</i> B.A., Susquehanna University; M.A., Ohio University	<b>HENRY C. TURBERVILLE JR.</b> Associate Professor <i>Health, Physical Education, and Athletics</i> B.S., M.A., University of Alabama
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<b>ANTHONY J. SYLVESTER</b> Associate Professor <i>History</i> A.B., Newark College of Rutgers University; M.A., Rutgers University	<b>CAROL J. VENUTO</b> Instructor (part-time) <i>Developmental Instruction</i> B.A., Houghton College; M.S., Syracuse University
<b>M. GENE TAYLOR</b> Professor <i>Physics</i> B.S., Muskingum College; M.S., Ph.D., Brown University	<b>PETER B. VENUTO</b> Professor <i>Marketing and Management</i> B.A., Syracuse University; M.B.A., Ph.D., University of Santa Clara
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JOHN E. WAGGONER Assistant Professor B.A., Shippensburg State College; M.S., The Pennsylvania State University	<i>Psychology</i>	DORETTE E. WELK Associate Professor B.S.N., D'Youville College; M.S.N., University of Pennsylvania	<i>Nursing</i>
ROLENE WAGNER Assistant Professor <i>Health, Physical Education, and Athletics</i>	<i>Athletic Trainer</i>	CAROL M. WHITE Associate Professor A.B., M.S., West Virginia University; Ph.D., University of Minnesota	<i>Curriculum and Foundations</i>
B.S., Lock Haven State College; M.Ed., East Stroudsburg University		VIBERT L. WHITE Assistant Professor B.A., Bethune-Cookman College; M.A., Purdue University; Ph.D., Ohio State University	<i>History</i>
J. CALVIN WALKER Professor <i>Chairperson, Psychology</i>		BRUCE E. WILCOX Assistant Professor B.S., M.S., State University of New York at Oswego; Ph.D., University of Cincinnati	<i>Chemistry</i>
B.A., Muskingum College; Ed.M., Ed.D., Temple University		ANNE K. WILSON Associate Professor B.A., Carleton College; M.S., University of Maryland; Ph.D., The John Hopkins University	<i>Sociology and Social Welfare</i>
STEPHEN C. WALLACE Associate Professor <i>Chairperson, Music</i>		KENNETH T. WILSON JR. Associate Professor <i>Chairperson, Art</i>	
B.S., Mansfield State College; M.M., University of Michigan; D.Ed., The Pennsylvania State University		B.S., Edinboro State College; M.S., The Pennsylvania State University	
CHARLES WALTERS Assistant Professor B.M., DePauw University; M.F.A., University of Wisconsin; Ph.D., University of Michigan	<i>Art</i>	MELVYN L. WOODWARD Professor A.B., Bucknell University; M.B.A., Ph.D., The Ohio State University	<i>Marketing and Management</i>
PETER B. WALTERS Instructor <i>Coordinator, Tutorial/504 Services</i>		IRVIN WRIGHT Assistant Professor <i>Assistant Director, Developmental Instruction</i>	
B.S., Bloomsburg State College; M.A., University of Scranton		A.A., Dodge City Junior College; B.Ed., State University of New York at Buffalo; M.Ed., University of Toledo	
R. EDWARD WARDEN Associate Professor B.S., Millersville State College; M.A., Villanova University	<i>Curriculum and Foundations</i>	STEPHEN G. WUKOVITZ Associate Professor B.A., M.A., Montclair State College	<i>Physics</i>
DAVID E. WASHBURN Professor B.A., M.Ed., Ph.D., University of Arizona; Postdoctoral Certificate in Multicultural Education, University of Miami	<i>Curriculum and Foundations</i>	DEE ANNE WYMER Assistant Professor B.A., M.A., Ph.D., The Ohio State University	<i>Anthropology</i>
LYNN A. WATSON Professor B.S., Shippensburg State College; M.Ed., D.Ed., The Pennsylvania State University	<i>Curriculum and Foundations</i>	ROBERT P. YORI Professor B.S., Bloomsburg State College; M.B.A., Lehigh University; Ph.D., The Pennsylvania State University	<i>Accounting</i>
ROBERT N. WATTS Professor B.S., Susquehanna University; M.B.A., Ohio University	<i>Marketing and Management</i>		

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*Communication Studies*

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University

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B.S., West Virginia Wesleyan College; M.L.S., University  
of Pittsburgh; M.A. University of Scranton

L. PATRICIA ZONG  
Assistant Professor  
*Nursing*  
B.S.N., M.S.N., University of Pennsylvania

## ADJUNCT FACULTY

*Medical Technology Program*

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Abington, Pa.

Paul J. Cherney, M.D., Medical Adviser  
Barbara J. Scheelje, M.T. (ASCP), Program Director

### The Allentown Hospital

Allentown, Pa.

P. L. Child, M.D., Medical Adviser  
Beth R. Cepil, S.M. (AAM), M.T. (ASCP), C.L.Sp.M.  
(NCA), Program Director

### The Bryn Mawr Hospital

Bryn Mawr, Pa.

Charlotte W. Roland, M.D., Medical Adviser  
Nancy M.G. Calder, M.Ed., M.T. (ASCP), Program  
Director

### The Chester County Hospital

West Chester, Pa.

E.A. Bentley, M.D., Medical Adviser  
Christine Yowell, M.T. (ASCP), Program Director

### Divine Providence Hospital

Williamsport, Pa.

Galal M. Ahmed, M.D., Medical Adviser  
Loretta A. Moffatt, M.T. (ASCP), Program Director

### Geisinger Medical Center

Danville, Pa.

John J. Moran, M.D., Medical Adviser  
Alvin Swartzenuber, M.T. (ASCP), Program Director

### Harrisburg Hospital

Harrisburg, Pa.

Him G. Kwee, M.D., Medical Adviser  
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Director

### Lancaster General Hospital

Lancaster, Pa.

Gerald R. Fahs, M.D., Medical Adviser  
Nadine E. Gladfelter, M.T. (ASCP), Program Director

### Nazareth Hospital

Philadelphia, Pa.

William J. Warren, M.D., Medical Adviser  
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Director

### Polyclinic Medical Center of Harrisburg

Harrisburg, Pa.

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Lynn L. Russell, M.A., M.T. (ASCP), Program  
Director

**The Reading Hospital and Medical Center**  
Reading, Pa.

I. Donald Stuard, M.D., Medical Adviser  
Sharon K. Strauss, M.T. (ASCP), Program Director

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Sayre, Pa.

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**Rolling Hill Hospital**  
Elkins Park, Pa.

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**Sacred Heart Hospital**  
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Sandra A. Neiman, M.T. (ASCP), C.L.S. (NCA),  
Program Director

**St. Joseph Hospital**  
Reading, Pa.

Jasper G. Chen See, M.D., Medical Adviser  
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Scranton, Pa.

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Charlottesville, Va.

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Cheryl V. Leitch, M.T. (ASCP), S.H. (ASCP),  
Program Director

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**York Hospital**  
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Chairman of Laboratory Medicine

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Ph.D., Associate in Laboratory Medicine

ARCHIMEDES D. GARBES, M.D.  
Associate in Laboratory Medicine

MILDRED LOUISE KAISER FLEETWOOD  
Ph.D., Associate in Laboratory Medicine

CHRISTINE E. SMULL  
Ph.D., Associate in Laboratory Medicine

ALVIN SWARTZENTRUBER  
B.S., Educational Coordinator in the  
School of Medical Technology

ALOYSIOUS J. SHULSKI  
B.A., Supervisor of Clinical Chemistry Laboratory

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Benjamin S. Andrews (May 1985)  
Joan M. Auten (July 1987)  
J. Weston Baker (May 1984)  
Donald R. Bashore (August 1983)  
Iva Mae V. Beckley (May 1970)  
R. Clark Boler (May 1982)  
Stephen M. Bresett (May 1987)  
Boyd F. Buckingham, vice president emeritus  
(December 1981)  
Robert L. Bunge (August 1983)  
James B. Creasy (May 1986)  
Robert G. Davenport (May 1986)  
Barbara M. Dilworth (December 1982)  
Edson J. Drake (December 1982)  
Virginia A. Duck (January 1984)  
C. Stuart Edwards (June 1979)  
John A. Enman (December, 1984)  
Howard F. Fenstemaker (May 1963)  
Halbert F. Gates (May 1981)  
Glenn A. Good (May 1984)  
Robert B. Hessert (July 1987)  
Craig L. Himes (January 1983)  
Clayton H. Hinkel (December 1980)  
John A. Hoch, dean emeritus (May 1975)  
Kenneth C. Hoffman (December 1983)  
Russell E. Houk (May 1982)  
Ralph R. Ireland (May 1980)  
Ellamae Jackson (August 1971)  
Mary Lou F. John (December 1984)  
Royce O. Johnson (May 1973)  
Warren I. Johnson (May 1977)  
Elinor R. Keefer (July 1968)  
Robert L. Klinedinst (January 1983)  
Charles C. Kopp (May 1985)  
Phillip H. Krause (October 1982)  
Julius R. Kroschewsky (May 1986)  
Margaret R. Lauer (May 1984)  
Margaret C. Lefevre (December 1976)  
Ellen L. Lensing (June 1982)  
Milton Levin (February 1984)  
Cyril A. Lindquist (May 1975)  
Margaret J. Long (May 1986)  
Thomas R. Manley (May 1981)  
John P. Master (June 1986)  
Lucy Mccammon (January 1958)  
Margaret E. Mccern (May 1976)  
Joanne E. McComb (May 1986)

James H. McCormick, president emeritus (September 1984)  
Michael J. McHale (May 1983)  
Eli W. McLaughlin (June 1986)  
Nelson A. Miller (January 1983)  
Robert C. Miller (December 1985)  
Clyde S. Noble (May 1979)  
Hildegard Pestel (August 1974)  
Donald D. Rabb (January 1984)  
Francis J. Radice (August 1985)  
Emory W. Rarig Jr., dean emeritus (January 1985)  
Gwendolyn Reams (August 1976)  
Herbert H. Reichard (May 1971)  
Emily A. Reuwsaat (May 1981)  
Stanley A. Rhodes (May 1982)  
Alva W. Rice (May 1980)  
Robert D. Richey (May 1983)  
Kenneth A. Roberts (August 1972)  
Betty J. Rost (May 1982)  
Ray C. Rost (May 1984)  
Walter S. Rygiel (January 1968)  
Martin A. Satz (May 1979)  
Richard C. Savage (May 1985)  
Tobias F. Scarpino (May 1982)  
Russell F. Schleicher (May 1962)  
Bernard J. Schneck (May 1982)  
Anna G. Scott (May 1956)  
Gilbert R. Selders (August 1987)  
Rex E. Selk (May 1982)  
Ruth D. Smeal (December 1978)  
Richard M. Smith (December 1979)  
Eric W. Smithner (May 1983)  
Robert R. Solenberger (May 1982)  
Margaret M. Sponseller (August 1981)  
Richard J. Stanislaw (May 1982)  
William B. Sterling (May 1973)  
Thomas G. Sturgeon (May 1977)  
David A. Superdock (May 1986)  
Alfred E. Tonolo (December 1982)  
Joseph P. Vaughn (May 1986)  
Robert D. Warren (January 1984)  
Margaret S. Webber (January 1984)  
Norman E. White (May 1985)  
Elizabeth B. Williams (August 1969)  
William G. Williams (August 1982)  
Richard O. Wolfe (May 1980)  
William S. Woznek (May 1986)  
Matthew Zoppetti (May 1986)

*(Date indicates month and year of retirement.)*

# ADMINISTRATIVE STAFF

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Assistant Comptroller      *Accounting*  
B.S., University of Steubenville

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JOSEPH C. QUINN Director	<i>Purchasing</i>		
COLIN REITMEYER Specialist A.A., Williamsport Area Community College; B.A., University of Tennessee	<i>Physical Plant</i>	J. DANIEL VANN Director B.A., University of North Carolina; M. Librarianship, Emory University; M.A., Ph.D., Yale University	<i>Library Services</i>
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		DONALD W. YOUNG Assistant Director B.S., M.S., West Chester State College	<i>Residence Life</i>

# INDEX

- Academic,  
computing facilities, 36  
dismissal, 10  
dishonesty policy, 12  
examination policy, 11-12  
good standing, 10  
grievances, 24  
policies, 5  
probation, 10
- Academic Advisement, 13, 163  
change of area of study, 13  
diagnostic testing program policy, 13
- ACCOUNTING**, 119, 122-124  
Business Administration, 118-120  
Business Education, 120
- Accreditation, 1  
teacher education, 130
- Administrative computer services, 36
- Administrative Staff, 184
- Admission,  
application procedures, 2  
campus visits, 3  
correspondence, 2  
criteria, 2  
early admission, 3  
first-year students, 2  
international students, 3  
nondegree students, 3, 162-163  
transfer students, 2  
readmission, 3
- ADULT HEALTH**, 70-73
- Advanced Placement and CLEP, 4
- Air Force ROTC, 157-158
- Allied Health Sciences, 147-150
- Ambulance Service, 22
- Andruss Library, 34
- ANTHROPOLOGY**, 40-41
- Appeals for Reinstatement, 10
- Application for Admission, 2
- Archives, 35
- Army ROTC, 158-160
- ART**, 42-45  
art history, 42  
art studio, 42, 43-45
- Art on Campus, 24
- Arts and Sciences, College of, 37-116
- Associate Degree, 11  
Health Services Associate, 149
- Athletics, 25,  
Health, Physical Education, and 70
- Audiology, 133-137
- Auditing Courses, 6
- Automobile Registration, 25
- Bakeless Center for the Humanities, 32
- Benjamin Franklin Hall, 33
- Biological and Allied Health Sciences, 46-52
- BIOLOGY**, 46-50  
marine biology, 46
- marine science, 50-51  
microbiology, 46  
secondary education, 143
- Bloom Magazine*, 21
- Bloomsburg University,  
accreditation, 1, 130  
Foundation, 35  
history, 1  
location, 1  
organization, 1
- Buckalew Place, 34
- Buildings and Facilities, 32-34
- Business, College of, 117-127
- BUSINESS ADMINISTRATION**,  
accounting, 119, 122-124  
economics, 119  
finance and business law, 119, 126, 127  
information processing, 119, 120  
management, 119, 120, 124-125  
marketing, 119, 120, 126-127
- BUSINESS EDUCATION**, 120-122  
certification, 120  
information processing, 119, 120  
and Office Administration, 120-121
- Business Law, 127
- Campus,  
Child Center, 25-26  
map, inside back cover  
postal service, 24  
visits, 3
- Career Concentrations, 39
- Career Development Center, 24
- Carver Hall, 1, 34
- Centennial Gymnasium, 33
- Center for Academic Development, 14
- CHEMISTRY**, 53-55  
Clinical Chemistry, 53, 182  
secondary education, 143
- Child Care,  
*see* Campus Child Center
- Class Standing, 6
- Clinics, 156
- Coaching, Secondary Education, 145
- College of  
Arts and Sciences, 37-116  
Business, 117-127  
Professional Studies, 128-156
- COMMUNICATION STUDIES**, 55-57
- COMMUNICATION DISORDERS**, 132-137  
and Special Education, 132-139
- COMPUTER and INFORMATION SCIENCE**,  
Arts and Sciences degree program, 58  
Business degree program, 122-123, 127-128
- Computer and Information Systems, 122-123, 127-128
- Computer Services, 36
- Comprehensive Social Studies, 144
- Conferences and Workshops, 163  
mini-courses, 162

- Cooperative Education, 163  
Counseling, 23  
Course(s),  
    auditing, 6  
    General Education Requirements, 27  
    load, 6  
    nondegree, 162  
    overload, 6  
    repeat policy, 8  
Credit, 26  
    by examination, 6  
    evaluation of transfer credits, 9  
    nondegree students, 162  
Criminal Justice, 116  
Curriculum Materials Center, 156  
Curriculum and Foundations, 139  
**DENTAL HYGIENE**, 149-150  
Developmental Instruction, 14  
Dining Commons, 33  
Dismissal,  
    academic, 10  
    appeals, 10  
**EARLY CHILDHOOD EDUCATION**, 141-143  
**EARTH AND SPACE SCIENCE**,  
    geography and earth science, 65-68  
    secondary education, 145  
**ECONOMICS**, 58-60  
    business, 58, 119  
    political, 58  
Education, School of, 129-147  
Education of the Hearing Impaired, 133  
Educational Computing Laboratory, 156  
Educational Foundations, 146-147  
**ELEMENTARY EDUCATION**, 129, 139-143  
Engineering,  
    See Liberal Arts and Engineering  
**ENGLISH**, 61-64  
    secondary education, 144  
Evaluation Criteria, 2  
Examination Policy, 11-12  
Expenses, Fees, and Refunds, 16-18  
Experiential Learning, 24, 163  
Extended Programs, School of, 161-163  
Faculty, 167-180  
    adjunct, 181-182  
    emeriti, 183  
Fees, 16-18  
    advance payment, 16  
    basic, 16  
    community activities, 18  
    housing, 16  
    late registration, 17  
    meals, 17  
    miscellaneous, 17  
    orientation, 17  
    refund policies, 18  
    summer session, 16  
    transcript, 17  
Finance, 119, 126  
Final Examination Policy, 11-12  
Financial Aid, 18  
Fraternities, 21  
**FRENCH**, 80-81  
    secondary education, 144  
Full-time Student, definition, 5  
General Education,  
    requirements, 27-28  
    courses, 28-31  
General Sciences,  
    secondary education, 144  
**GEOGRAPHY**, 65-66  
**GEOLOGY**, 65, 66-68  
German, 81-82  
Good Standing, 10  
Grades,  
    change of, 8  
    definition, 7-8  
    quality points, 7  
    quality point average, 8  
Graduate Studies, School of, 164-165  
Graduation, 11  
    requirements, 11  
    honors, 11  
    multiple degrees, 11  
    teacher education programs, 131-132  
Haas Center for the Arts, 34  
Hartline Science Center, 32  
**HEALTH, PHYSICAL EDUCATION, and ATHLETICS**, 69-72  
Health Services, 22  
**HEALTH SERVICES ASSOCIATE**, 149  
Health Sciences, School of, 147-156  
**HISTORY**, 72-76  
Honor(s),  
    and professional societies, 21  
    Honors Program, 38  
    University Scholars Program, 26-27  
Housing,  
    fees, 16  
    on-campus, 19  
    off-campus, 19  
Independent Study, 39  
Insurance,  
    student, 22  
    athletic, 22  
Interdisciplinary Studies, 77-79  
International Students, 3  
Internships, 163  
Intramurals, 25  
Institute for Interactive Technologies, 36  
Italian, 84  
Journalism, 87  
    certificate, 87  
Kehr Union, 21  
Languages and Cultures, 79-84  
    program abroad, 79, 163  
Latin, 84  
Liberal Arts and Engineering, 85-86  
Library, 34-35

- Marine Platoon Leaders Program, 160  
Marine Science, 50  
Marine Science Consortium, 68  
**MASS COMMUNICATIONS**, 87-90  
practicums and internships, 87  
**MATHEMATICS**, 91-94  
and computer science, 91, 94-95  
secondary education, 144  
**MEDICAL TECHNOLOGY**, 147-148  
Microbiology, 46  
**MUSIC**, 96-101  
Navy Hall, 35  
Nelson Fieldhouse, 35  
Nondegree Courses, 162  
**NURSING**, 150-156  
degree and licensure, 150  
probation/leave of absence, 153-154  
*Obiter*, 20  
**OFFICE ADMINISTRATION**, 120-122  
Organizations, 20  
Orientation, 23  
Pass-Fail, 6  
**PHILOSOPHY**, 102-103  
**PHYSICS**, 104-106  
Liberal Arts and Engineering, 85-86  
secondary education, 144  
*Pilot*, 20  
**POLITICAL SCIENCE**, 107-109  
Pre-Professional and Career Advisement, 39  
**PRE-CYTOTECHNOLOGY**, 150  
Pre-Law, 39  
**PRE-OCCUPATIONAL THERAPY**, 150  
**PRE-PHYSICAL THERAPY**, 150  
Professional Studies, College of, 128-156  
Programs Abroad, 79, 163  
**PSYCHOLOGY**, 110-112  
Public Relations/Advertising, 87  
Publications, 21  
Quality Point Average, definition, 8  
Quality Points, 7  
QUEST, 24  
**RADIOLOGICAL TECHNOLOGY**, 149  
Reading Clinic, 156  
Readmission, 3  
Recreation, 25  
Refund Policies, 5  
Registration Policies, 18  
Residence Requirement, 19  
Residence Halls, 33  
Retention, 27  
ROTC,  
Air Force, 157  
Army, 158  
Russian, 84  
Schedule Change, 5  
Scholars Program, 26-27  
eligibility, 27  
retention, 27
- School of,  
Education, 129-147  
Extended Programs, 161-163  
Graduate Studies, 164-165  
Health Sciences, 147-156  
Scranton Commons, 33  
Second Baccalaureate Degree, 3  
Secondary Education, 143-146  
areas of specialization, 143-145  
Services, Clinics, Learning Centers, 156  
**SIGN LANGUAGE and INTERPRETER TRAINING**, 133-137  
**SOCIAL WELFARE**, 115-116  
**SOCIOLOGY**, 113-115  
and Social Welfare, 113-115  
Sororities, 21  
**SPANISH**, 82-83  
secondary education, 144  
**SPECIAL EDUCATION**, 137-139  
Special Programs, 157-160  
**SPEECH COMMUNICATIONS**, 55-56  
Speech, Hearing, and Language Clinic, 156  
Student,  
insurance, 22  
organizations, 20  
publications, 21  
union, 34  
grievances, 24  
Student Life and Services, 18-26  
Student Support Services, 15  
Student Responsibility, 5  
Summer Sessions, 163  
fee, 16  
Teacher Education, 129-132  
admission, 131  
certification, 130  
field experiences, 132  
student teaching, 132  
retention, 131  
Telecommunications/Film, 87  
Testing,  
examination policy, 11-12  
institutional, 23  
diagnostic program policy, 13  
**THEATER**, 55-57  
Transfer Student,  
admission, 2  
Tutorial/504 Services, 15  
Undergraduate Curricula, 26-31  
University Policy, 5  
University Store, 24  
Upward Bound, 15  
Veterans, 24  
*Voice, The*, 21  
Waller Administration Building, 33  
Withdrawal,  
from a course, 8  
from the university, 9

# **Academic Calendar**

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## **1990-1991**

### **Semester I**

Classes begin  
Labor Day - No classes  
Fall weekend begins  
Thanksgiving recess begins  
Classes resume  
First semester classes end  
Final exam period begins  
Winter Commencement

### **1990**

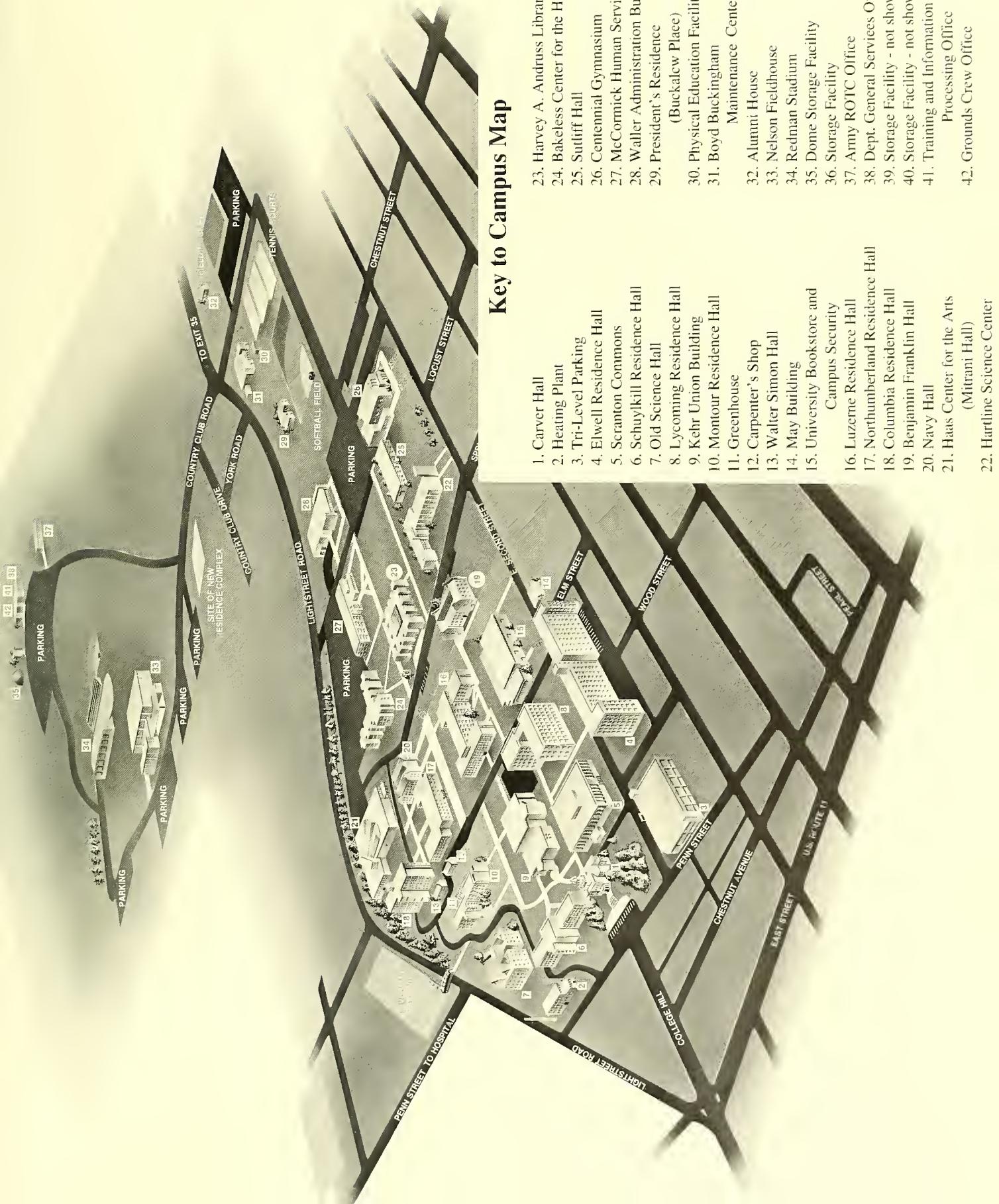
Monday, Aug. 27,  
at 8 a.m.  
Monday, Sept. 3  
Thursday, Oct. 18  
at 10 p.m.  
Wednesday, Nov. 21,  
at 1:50 p.m.  
Monday, Nov. 26,  
at 8 a.m.  
Saturday, Dec. 8  
Monday, Dec. 10  
Sunday, Dec. 16

### **Semester II**

Classes begin  
Mid-term  
Semester break begins  
Classes resume  
Second semester classes end  
Final exam period begins  
Spring Commencement

### **1991**

Monday, Jan. 14,  
at 8 a.m.  
Tuesday, March 5  
at 10 p.m.  
Friday, March 22  
at 10 p.m.  
Monday, April 1,  
at 6 p.m.  
Saturday, May 4  
Monday, May 6  
Saturday, May 11



## Key to Campus Map

1. Carver Hall
2. Heating Plant
3. Tri-Level Parking
4. Elwell Residence Hall
5. Scranton Commons
6. Schuykill Residence Hall
7. Old Science Hall
8. Lycoming Residence Hall
9. Kehr Union Building
10. Montour Residence Hall
11. Greenhouse
12. Carpenter's Shop
13. Walter Simon Hall
14. May Building
15. University Bookstore and Campus Security
16. Luzerne Residence Hall
17. Northumberland Residence Hall
18. Columbia Residence Hall
19. Benjamin Franklin Hall
20. Navy Hall
21. Haas Center for the Arts  
(Mitrani Hall)
22. Hartline Science Center
23. Harvey A. Andrus Library
24. Bakless Center for the Humanities
25. Sutliff Hall
26. Centennial Gymnasium
27. McCormick Human Services Center
28. Waller Administration Building
29. President's Residence  
(Buckalow Place)
30. Physical Education Facility
31. Boyd Buckingham Maintenance Center
32. Alumni House
33. Nelson Fieldhouse
34. Redman Stadium
35. Dome Storage Facility
36. Storage Facility
37. Army ROTC Office
38. Dept. General Services Office
39. Storage Facility - not shown
40. Storage Facility - not shown
41. Training and Information Processing Office
42. Grounds Crew Office



BLOOMSBURG UNIVERSITY

A Pennsylvania State System of Higher Education University